University of Alberta

Bridging the Gap:
a process of weight loss with anorexiant therapy

by

Carlyn Iris Volume ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment
of the requirements for the degree of Master of Science

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled, Bridging the Gap: a process of weight loss with anorexiant therapy submitted by Carlyn Iris Volume in partial fulfillment of the requirements for the degree of Master of Science in Health Promotion.

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Dedication

To the nine women who saw fit to speak with me and share their personal experiences with weight loss and anorexiant medications. Their generosity and patience during the interviews will always be appreciated.

I wish them the best of luck with this "never-ending story".

ABSTRACT

The purpose of this study was to describe the process women experience when taking anorexiant medications. Grounded theory methods were employed to analyze data from interviews with nine women. The women experienced a 3-stage process called Bridging the Gap. The first phase, reaching a space, describes how the women came to be placed on the medications. The second phase, negotiating the bridge, articulates the women's experiences of weight loss while on the medications. Achieving a balance, the final phase, describes the women's experiences as they discontinued the medications. A wave of control was evident that illustrated the women's movement from a state where they were out of control and obese to one where they gained control when using the medications and finally, maintained control after the medications were discontinued. This model may help professionals understand women's battles with weight control and their experiences with medications which may cultivate non-judgmental attitudes and empathic responses about individuals struggling with weight control.

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CHAPTER 1

INTRODUCTION

The pressure for women to become and remain thin is ingrained in Western society and many scholars argue that weight control has become such an obsession to most women that "weight has become the lens through which experience is viewed" (Allan, 1994, p. 525). An increasing number of women are feeling pressure to conform to society's ideal of what a woman's figure should be. Despite the social and health pressures to become or remain thin and the billions of dollars spent to lose weight each year, evidence suggests that there is a weight-gaining trend in the adult populations of North America (Statistics Canada, 1994; St Jeor, 1993). It has been estimated that between 25% and 50% of women are currently overweight (Bjorntorp & Brodoff, 1992) and greater than 44% of women are currently dieting (Bjorntorp & Brodoff, 1992; Serdula, et al., 1993). Obesity is also prevalent in Alberta. A study evaluating the heart health of Albertans suggests that 37% of rural and 26% of urban Albertan women are obese as defined by a body mass index (BMI) of 27 or greater (Joffries, Titanich, & Hessel, 1993).

The health consequences of obesity have been well documented by health care researchers. These include an increased risk for insulin-resistance, hypertension, dyslipidemia, cardiovascular disease, non-insulin dependent diabetes mellitis, respiratory dysfunction, arthritis, gallstones and cholecystitis. In addition, overweight women have significantly higher rates of endometrial, gall bladder, cervical, ovarian and breast cancers (Pi-Sunyer, 1993). A recent survey of 1000 women suggests that even though women believe obesity is a major health concern, the main motivation to lose weight is driven by society's pressure to attain the ideal body (The American Dietetic Association & The Canadian Dietetic Association, 1995). In an effort to assist in successful weight loss and weight loss maintenance, a variety of methods have been employed. These include behavior modification, calorie restriction and pharmacologic therapy (Boisaubin, 1996).

Exercise is an important contributor to weight loss and maintenance. Physically active adults are less likely to gain weight than sedentary individuals. In addition, individuals that exercise, regardless of their weight, suffer from less morbidity and mortality than those who do not exercise (Blair, 1993). Exercise alone, appears to contribute minimally to weight loss. Studies show an average of two to three kilogram weight loss when individuals use exercise as their only weight loss method (King & Tribble, 1993). However, the combination of diet and exercise appears to have significant benefits in weight loss and maintenance of health (Blair, 1993).

It appears that the practice of dieting is extremely widespread in the female population of North America (Horm & Anderson, 1993; Levy & Heaton, 1993; Serdula, 1993). A telephone survey of adults who reported to be currently dieting averaged one dieting attempt per year for the past 2 years with each attempt averaging 5 to 6 months (Levy & Heaton, 1993). A survey of the dieting practices of young adults found that 44% of female high school students and 15% of male high school students were currently dieting. Methods employed by students attempting to lose weight included exercise, skipping meals, taking diet pills and vomiting (Serdula et al., 1993). Another survey that examined adult's dieting practices suggested that the majority of individuals trying to lose weight were doing so by changing their diets and attempting to exercise regularly. Other methods included weighing oneself regularly, walking, using diet soft drinks, taking vitamin and mineral supplements, skipping meals, using commercial meal replacement products and participating in organized weight loss programs (Levy & Heaton, 1993).

Unfortunately, success rates of achieving a goal weight and maintaining that weight once it has been achieved have been estimated between 5% and 10% (Adkinson & Hubbard, 1994; Committee on Diet and Health, 1989). Several reasons for the almost inevitable weight gain have been hypothesized. One theory suggests that overeating is a symptom of unresolved conflicts. For example, excessive "orality" may have occurred due to premature weaning or food has taken the place of affection and love in the individual's life. Yet another theory suggests that overeating is created by environmental stimuli. Behavioral approaches advocate a permanent change in eating and exercise habits to successfully maintain weight loss (Foreyt & Goodrick, 1993).

Unsuccessful weight loss attempts are beginning to be viewed as detrimental, and that the act of dieting may precipitate binge eating which contributes to weight gain and begins a cycle of disordered eating. McCargar and Yeung (1991) suggest that bingeing may be caused by a cognitive change in eating style created by dieting and the body may react to physiologically preserve its weight. In addition to the act of bingeing, purging, excessive caloric restriction and fasting may be employed by individuals to achieve successful weight loss (Marchessault, 1993).

With society's continued interest in losing weight and being healthy, as well as the tendency of North Americans to want "quick results" in their weight loss efforts, the popularity of prescription medications is increasing (Weintraub, 1992). The National Institute of Health Workshop on Obesity has suggested that drugs be used as only one component of a comprehensive weight reduction program (Adkinson and Hubbard, 1994).

The arsenal of medications used to treat obesity is constantly growing. Drugs currently available range from fibre supplements that produce the feeling of satiety and topical anesthetics that decrease taste to adrenergic and serotonergic agonists that centrally increase metabolism or decrease appetite (Bray, 1992). New drugs under investigation include a new monoamine antidepressant, a lipase inhibitor and an inhibitor of gastric emptying (Popovich & Wood, 1997). These medications are also receiving a great deal of attention from the medical professions and the public alike. For example, after merely six months on the U.S. market, more than two million prescriptions were written for dexfenfluramine and the company that manufactures the drug estimates that 10 million people around the world have used it since 1985 (Wannamaker, 1997). Recent studies have suggested that the pharmacologic treatment of obesity using medications such as fenfluramine, dexfenfluramine, phentermine or selective serotonin reuptake inhibitors alone or in combination with each other are an effective method of achieving short-term weight loss (Adkinson, Blank, Loper, Schumacher, & Lutes, 1995). Unfortunately, there is little evidence for maintaining weight loss once the prescription medications are withdrawn (Bray, 1992). If the pharmacologic treatment of obesity did not accompany the appropriate lifestyle changes necessary to maintain weight loss, it can be hypothesized that women may experience weight gain upon the discontinuation of anorexiant medications.

In summary, there is an overwhelming pressure on women to achieve an ideal body type or image. This pressure comes in the form of society's pressure to be slim as well as concerns about the health consequences of obesity. These pressures lead a large percentage of women in North America to restrict calorie intake or employ other methods to achieve weight loss. Despite the variety of methods used to achieve weight loss, there is a weight gaining trend in North American society and success rates of weight loss initiatives are considered dismal. To counter the lack of success in dieting attempts, pharmaceutical companies have begun to produce and market several anorexiant medications intended to help obese individuals lose weight. Unfortunately, many individuals who have taken these medications fail to maintain their weight loss over the long term.

Statement of Problem and Purpose

The purpose of the study was to identify the process women experience when taking anorexiant medications by utilizing grounded theory methodology. These medications are usually used for short periods of time, so, often in less than one year women have completed the entire therapy and are trying to maintain their weight without the benefit of pharmacologic therapy (Adkinson & Hubbard, 1994; Goldstein, Rampey & Enas, 1994). The completion of this study will provide practitioners with an example of what women experience from the time that they consider going on these medications until after they discontinue therapy. In this way, health care professionals who interact with these patients will have increased knowledge to reflect on what their patients may be experiencing at various times throughout and after therapy.

Research Questions

By studying the experiential process of being on anorexiant therapy, several research questions will be addressed including:

1. What influences women to make the decision to commence pharmacologic treatment for obesity?

2. What processes do women experience while on the medication(s)?
3. How do women adapt to life without the medication(s)?

Significance

As quantitative studies are emerging that discuss risks and benefits of initiating drug therapy for obesity, it is imperative that we examine why women are choosing to place themselves on these medications. It is also important to understand the experiences they have while on the medications and how they plan to cope with or are coping with maintaining their weight loss once the medications are withdrawn. A greater understanding of the process women experience when they take anorexiant medications achieves several ends. First, it provides health care professionals with an appreciation of the pressures that women face to achieve successful weight loss and how their weight loss attempts are tightly linked to their self-esteem. It also reflects the decision making process that women have undertaken before they seek out these medications to treat their obesity. Second, the process informs health care professionals about the different phases that women may experience and different actions they may take while on these medications thereby providing them opportunities to counsel or intervene to facilitate weight loss success. Finally, it gives us all an appreciation for the emotions and pressures each of these women face as they make yet another attempt at weight loss and maintenance.

To date, there have been no qualitative studies that examine women's experiences using anorexiant medications. For this reason, a qualitative method of inquiry has been chosen as it provides a description of women's experiences on these medications by using an inductive and interactive approach (Morse & Field, 1995). It is hypothesized an underlying process accompanies women's experiences in choosing to take and discontinue the medications. The grounded theory methodology has been chosen to elucidate this experiential process (Morse & Field, 1995; Strauss & Corbin, 1990).

Definition of Terms

Anorexiant medications are defined as those prescription medications that are used specifically for the purpose of treating obesity. The medications mentioned in this study may include: diethylpropion (Tenuate Dospan®), dexfenfluramine (Redux®), fenfluramine (Ponderal®) and phentermine (Ionamin®, Fastin®). The combination named "Fen-phen" is a combination of phentermine taken each morning and fenfluramine taken in the evening.

CHAPTER 2

LITERATURE REVIEW

Obesity remains a growing concern in the North American population for reasons of health (Pi-Sunyer, 1993) and fashion (The American Dietetic Association & The Canadian Dietetic Association, 1995; Rodin, 1993). Methods of weight loss employed by North Americans include: behavior modification, calorie restriction and recently, pharmacologic therapy (Boisaubin, 1996). The popularity of medication use is increasing (Weintraub, 1992; Wannamaker, 1997) and, with this phenomena it is important to understand women's experiences as they decide to be placed on the medications and continue drug therapy.

To date, there have been no qualitative studies that describe the experiences of women who take or have taken these medications. A search of the health databases, including Medline and CINAHL using keywords obesity, fenfluramine, dexfenfluramine, diethylpropion, phentermine, women, and qualitative research revealed a variety of studies that dealt with the physical aspects of taking this type of medication, however did not address the emotional and physical aspects in the context of patients' lives.

The review of the literature will discuss the issue of obesity, its definition and health consequences. Weight control including the prevalence, method, reasons and risks of dieting in North America will then be presented. Options for patients' weight loss will be discussed that include the variety of prescription and non-prescription medications currently available. A qualitative study that identified a process called restructuring that described the experiences of dieters who participated in weight loss programs will be introduced. In addition, popular debates in the literature with regard to weight loss will be mentioned to place a context on the pressure women experience with respect to attaining the "perfect body".

Obesity

Dieting has become a popular past time in the lives of many North American women. It has been estimated that between 25% and 50% of women are currently overweight and greater than 44% of women are currently dieting (Bjorntorp & Brodoff, 1992; Serdula et. al., 1993). A recent Alberta survey reflected these results with 36% of rural women being classed as overweight and 29% of urban women falling into this category also (Joffries, Titanich & Hessel, 1993).

Before continuing, it is important to define obesity, outline its causes and consequences and what successful treatment of obesity is. Obesity, or excess adipose tissue, can be defined as a Body Mass Index (BMI) of more than 30 kg/m^2. The BMI is currently the standard means of defining obesity and can be calculated by: BMI = weight (kg)/height (m)^2. From this calculation, a variety of classifications with regard to obesity can be made. A common way of assigning a descriptor to a BMI measurement is shown in the following table (Mason, 1997).

Table 1: Body Mass Index Categorization

BMI range	Grade	Descriptor
20 - 24.9	grade 0	desirable weight
25 - 29.9	grade 1	overweight
30 - 40	grade 2	obese
> 40	grade 3	severely or morbidly obese

Body Mass Index usage has limitations. Some individuals who are exceptionally muscular have a high BMI but would not be considered obese. In addition, recent evidence suggests that health risks of obesity are not just associated with the amount of adipose tissue, but where this adipose tissue resides (Mason, 1997). Adipose tissue that is found mainly in the central region of the body, otherwise known as the "apple-shaped" body, tends to be associated with the greatest number of health concerns. Individuals who possess fat tissue on the hips and thighs or can be considered "pear-shaped" tend to be at a decreased risk of health complications related to obesity. For this reason, another measure, the Waist:Hip Ratio, is now being considered an adjunctive method to assess central adiposity. For women, a score of greater than 0.85 indicates increased weight-related health risks (Kuhn & Rackley, 1993; Manson et al., 1990; Mason, 1997).

Causes of Obesity

The causes of obesity are varied and health care professionals have not completely agreed on them (Bray, York & Delaney, 1992). The deposition of fat stores for the purpose of providing energy appears to be an evolutionary survival mechanism for humans to survive periods of famine. People living within modern society, with its sedentary lifestyle and access to foods that often possess a high caloric content, are likely to gain weight. In other words, those who are obese are eating more energy than they expend.

There are several factors that contribute to the theory of why individuals gain weight. It appears that society's lack of activity is more to blame than its eating habits. For example, energy intake has dropped in the United Kingdom since the 1950's, yet obesity is becoming more prevalent in both adults and children (Mason, 1997).

The type of caloric content is an important factor in weight gain. High fat diets can promote weight gain for a variety of reasons. Firstly, the calorie content of fat is more concentrated than carbohydrates or proteins. Fat contains nine kilocalories of energy per gram whereas both protein and carbohydrate contain four kilocalories of energy (Mason, 1997; Clark, 1997). Secondly, fatty foods are usually considered more tasty so many individuals simply consume more of the high fat food product than they may consume of the low fat alternative. Finally, fat is treated differently within the body because carbohydrates, proteins and alcohol are more readily and preferentially oxidized by the body, thereby leaving fat ample opportunity to be stored as adipose tissue (Mason, 1997).

Research in genetics has tried to reveal on why individuals gain weight, however, there has been no conclusive evidence that genetics account for more than 25% of obesity cases. Health care professionals believe that environmental factors cause obesity more frequently than genetic ones. Geneticists have recently discovered a variety of genes in mice that appear to be responsible for obesity. These genes include the obesity (ob) gene, the diabetes (db) gene, the fat (fa) gene, the agouti yellow gene and the tubby gene. Of these genes, the ob gene has been found in the adipose tissue of humans. This gene encodes a protein called leptin which is thought to act as a negative feedback mechanism that informs the body about the amount of fat stores that are present. If the ob gene is dysfunctional in mice, there is insufficient leptin present to complete this task and the mice become obese. However, if the protein is administered to the mice, their food intake decreases. This breakthrough continues to encourage scientists to seek genetic explanations for at least a part of the phenomena of obesity (Mason, 1997).

Perceptions of what causes obesity differ in both public and expert opinion. A study surveying 50 scientists possessing M.D. and Ph.D.s actively involved in obesity research about the causes of obesity found significant differences between males and females. Females surveyed tended to believe that inactivity, carbohydrate craving and repeated dieting were more important causative factors of obesity than did their male counterparts. Both males and females believed that genetic factors played a role. Interesting differences related to the causes of obesity were found when comparing the responses of experts from North America and the United Kingdom. Metabolic defects were viewed as less important contributors by the scientists from the U.K., while repeated dieting and lack of willpower was seen as less important by those from North America (Bray, York & DeLaney, 1992).

Consequences of obesity

Hypertension

Obesity has been shown to adversely affect the cardiovascular system. Studies have suggested that obese individuals are at greater risk of hypertension than their slimmer counterparts (Stamler, Stamler, Riedlinger, Algera & Roberts, 1978). Two studies document similar results for every 10 kg increase in body weight a 3 mmHg increase in systolic pressure and a 2 mmHg increase in diastolic blood pressure occur (Boe, Humerfelt & Wedervang, 1957; Epstein, Francis, Hayner, Johnson, Kjelsberg, Napier, 1965). The Second National Health and Examination Survey (NHANES II) conducted on residents of the United States from 1976 to 1980, suggested that obese individuals aged 20 to 75 are 2.9 times more likely to develop hypertension than adults whose weight fell within normal limits. Overweight was defined a BMI greater than 27.3 in women and greater than 27.8 in men (Van Itallie, 1985).

The Framingham study suggested similar results. Men studied showed that for every 10% increase in body weight, blood pressure increased by 6.5mmHg and a 15% gain in weight was associated with a 18% increase in systolic blood pressure (Kannel, Brand, Skinner, Dawber & McNamara, 1967). Further, individuals who were 20% overweight had eight times the chance of being hypertensive, when compared to slimmer individuals (Kannel, Gordon, Offutt, 1969).

Blood Lipids

Obese individuals tend to experience changes in their blood lipids that can contribute to cardiovascular disease (Pi-Sunyer, 1993). It is well accepted that high levels of low-density lipoprotein (LDL) contribute to heart disease (McKenney, 1995). The Framingham study found that with every 10% increase in body weight, there was an increase of 12mg/dL of total cholesterol (Kannel & Gordon, 1979). HDL levels tend to be lower in obese individuals (Gordon, Castelli, Hjortland, Kannel & Dawber, 1977) and total and LDL cholesterol levels have been found to be normal (Montoye, Epstein, Kjelsberg, 1966) or elevated in obese individuals (Bjorntorp & Brodoff, 1992). HDL levels tend to be lower in obese individuals, therefore their corresponding LDL is often higher than desired and places them at increased risk for cardiovascular disease (McKenney, 1995).

Coronary Artery disease

Coronary Artery Disease (CAD) can be defined as non-fatal myocardial infarction (MI) and angina pectoris (Manson et al., 1990). Obesity is linked to CAD in two ways. Firstly, obesity indirectly affects CAD by increasing the risks of hypertension, hypercholesterolemia, undesirable cholesterol ratios and insulin resistance. Secondly, obesity increases the risks of CAD directly and independently of the above mentioned risk factors (Feinleib, 1985).

A study of over 115 000 American women suggested that a higher BMI was positively associated with CAD. Specifically, when adjusted for age and smoking habits, the relative risks for women increased from 1.0 for women with a BMI of less than 21, to 1.3 (95% CI, 0.9 to 1.9) for those with BMIs ranging from 21 to less than 25, to 1.8 (95% CI, 1.8 to 2.5) for a BMI from 25 to less than 29 and to 3.3 (95% CI, 2.3 to 4.5) for women with a BMI greater than 29. Women with a BMI between 25 and 28.9 have an 80% higher risk of coronary heart disease than do lean women (Manson et al., 1990).

Diabetes Mellitus

Diabetes is a significant health problem for women and it is estimated that women account for over half the incidence of diabetes (Tinker, 1994). Not only does diabetes contribute to cardiovascular disease causing a five-fold increase in CAD among women (Kuhn & Rackley, 1993), but it is also responsible for amputations (Tinkler, 1994), ocular disorders and nephropathy (Koda-Kimble & Carlisle, 1995). Obesity is tightly linked to the incidence of non-insulin dependent diabetes mellitus. The risk of diabetes is said to be two-fold in mildly obese, five-fold in moderately obese and ten-fold in severely obese individuals with risks increasing steeply as obesity increases (Pi-Sunyer, 1993).

Cancer

Cancer is still one of the leading killers in North America and it is estimated that diet can play a role in decreasing 30% to 70% of cancers (The American Dietetic Association & The Canadian Dietetic Association, 1995). For example, a prospective study following 750 000 men and women found a mortality ratio for men to be 1.33 and women to be 1.55 who were 40% overweight (Garfinkel, 1985). Specifically, overweight women have been shown to have significantly higher rates of endometrial, gallbladder, cervical, ovarian and breast cancers (Pi-Sunyer, 1993).

Breast cancer is a special concern for women, however there is debate as to the role that diet and obesity play in the development of this disease. Studies show that animals with high fat diets develop breast cancer more quickly than their counterparts who were maintained on low fat diets (Hankin, 1993). Studies comparing cancer rates of North American and European women who consume about 30% to 40% dietary fat to Japanese women who often consume fewer than 25% dietary fat seem to reinforce this finding (Goodwin & Boyd, 1987). However, the Nurses Health study did not link diets that contain 30% to 40% fat to an increased risk of cancer. Thus, it has been hypothesized that dietary fat must be below 25% before the protective mechanism is activated (Hankin, 1993;Willet et al., 1992). Excessive body weight is thought to increase a woman's chance of contracting breast cancer, however data are inconsistent. Some studies suggest that a 10 to 20 pound gain at 30 years of age can increase the chance of cancer, whereas other studies have suggested that thin pre-menopausal women and overweight post-menopausal women are at the greatest risk (Henderson, Ross & Pike, 1991).

Other cancers, such as colorectal cancer and endometrial cancer, have been shown to be positively associated with obesity and high fat diets. The Nurses study showed that a high fat diet is positively correlated with the incidence of colon cancer (Willet et al., 1992). The high fat/low fibre diet characteristic of North American culture seems to be a contributing factor to colon cancer (Slattery, Sorenson & Ford, 1988). Endometrial cancer has been shown to be more prominent in obese women. The reason for this seems to be due to the phenomena of obese women producing more estrogen than their thinner counterparts (Snowdon, 1985).

In summary, there are several consequences that have been attributed to obesity thereby making it a serious health concern. Epidemiological studies have shown that obesity contributes to hypertension, alterations in blood lipids, coronary artery disease, diabetes mellitus and cancer. For these reasons, health care professionals have suggested that all individuals maintain a desirable weight and eat nutritiously to decrease the risk of acquiring these diseases (The American Dietetic Association & The Canadian Dietetic Association, 1995; Pi-Sunyer, 1993)

Pressures to lose weight

The reason for dieting and concern over body image are vast and interplay with both physical, psychological and sociological factors (Fontaine, 1991; Marchessault, 1993; Pi-Sunyer, 1993; Rodin, 1993). As discussed earlier, the physical health concerns of obesity are widespread and health care professionals encourage the adoption of healthier lifestyles and better eating habits to combat the incidence of certain diseases (The American Dietetic Association & The Canadian Dietetic Association, 1995). One can surmise that avoidance of certain health consequences may play a role in the initiation and maintenance of weight loss efforts.

A strong influence on the phenomena of dieting is the pressure women experience to achieve the perfect body (Allan, 1994; Marchessault, 1993; Rodin, 1993). Throughout history, the "ideal" of women's bodies has changed to reflect social status (Akande, 1993). In this century alone, the ideal for women's bodies has changed shape countless times. For example, previous to World War I both slim women and voluptuous women were considered attractive. At the conclusion of the war and into the 1920's, the "flapper" became fashionable. The clothing donned in this era required women's bodies to become curveless and boy-like. Often women would diet and bind themselves to achieve this curveless look. The stock market crash marked the return of breasts and curves that were characteristic of the 1930's pinups. In the 1940's, with the advent of the nylon, the leg became the focus of attention while in the post-war era breasts became a strong focus. However, in the 1960's, the most striking change took place with the introduction of "Twiggy", an extraordinarily thin British model. From this point forward it appears that the ideal weight of women began to drop (Mazur, 1986).

The trend toward slimness continues even today. The "look" characteristic of the 1990's remains thinness, however fitness is now an added pressure. The "fit" look now requires women to maintain a low percentage of body fat and a musculature that compliments a well-sculpted body. The belief that thinness equates with good health now places additional pressure on women to lose weight (Rodin, 1993).

Another mediating factor in the trend toward weight loss is the stigmatization of the obese individuals in our society. Previously, plumpness was considered a desirable trait because it reflected prosperity, health and maternity. Studies now show, that children in our society associate obesity with negative characteristics (Marchessault, 1993). Even physicians describe obese patients as "ugly and weak-willed" (Maddox & Kiederman, 1969, p. 218) and believe that their obese patients lie about their weight loss efforts (Rothblum, 1990). Sadly, even obese individuals rank obese people as being unhappy, less self-confident, less self-disciplined, lazier and less attractive than their slimmer counterparts (Marchessault, 1993). This stigmatization has become so extreme that one author suggests that "obesity is interpreted as a transgression against the basic cultural and moral tenets. Obesity is seen as the failure to strive for self-control, will-power, rationality, competence and productivity" (Mackenzie, 1985, p 75.).

This cultural bias against obese individuals has impacted self-esteem and self-confidence of many people (Fontaine, 1991). Obese school age children are ridiculed by their peers and are often left out of social activity. By the time a child is eight years old, their concept of the ideal body type is similar to our culture's extremely thin ideal (Marchessault, 1993). This prejudice continues into adolescence and adulthood with similar negative effects. A Glamour magazine survey of 33 000 of its readers, found that although 25% were overweight, over 75% believed that they were fat. Of individuals surveyed that would be considered underweight, 25% believed that they were overweight (Brumberg, 1989; Sash, 1977). An even more depressing finding was that the women surveyed believed that weight loss was a more important source of happiness in their lives than a successful career and successful interpersonal relationships (Brumberg, 1989). Though the Glamour survey cannot be considered scientifically valid, it does place a context on what some North American women perceive their bodies to be and what importance weight and body image have in their lives.

Weight loss methods

Several studies have examined how individuals are attempting to lose weight. A survey of 11 467 high school students in the United States found that 44% of female students and 15% of male students were currently involved in weight loss efforts. These responses were taken from the Youth Risk Behavior Surveillance System which collected data from a representative sample of U.S. high school students in 1990. Weight loss methods of female students were exercise (51%), skipping meals (49%), taking diet pills (4%) and vomiting (3%) (Serdula, et al., 1993).

The Weight Loss Practices Survey sponsored jointly by the Food and Drug Administration and the National Heart, Lung and Blood Institute interviewed 1431 adults about their weight loss practices. It suggests that the average adult has attempted at least one weight loss effort in the past two years with each attempt lasting from 5 to 6 months. Approximately 71% of women report that they are implementing an exercise regimen and are altering their diet as a means of losing weight. Other weight loss practices that women frequently report include regular weighing (71%), walking (58%), using diet soft drinks (52%), taking vitamin and mineral supplements (33%), counting calories (25%), skipping meals (21%), using commercial meal replacements (15%), taking diet pills (14%), and participating in organized weight loss programs (13%). Rare methods of weight loss include fasting for 24 hours, using laxatives, using weight loss devices such as body wraps, having surgery or purging after eating. These methods combined, accounted for 10% of the weight loss practices with fasting being the most popular activity (Levy & Heaton, 1993).

Dieting

Dieting has become an integral part of the North American woman's life with studies citing that greater than 44% of women are currently dieting (Bjorntorp & Brodoff, 1992). Despite the fact that almost half of the female population are dieting, there appears to be a weight gaining trend in both the adult and child populations in North America and the United Kingdom (Manson et al., 1990; Mason, 1997; Statistics Canada, 1994). As stated previously, reasons for this include poor eating habits and lack of physical activity (Mason, 1997).

Women consistently report a higher incidence of dieting than do men (Serdula et al., 1993; Levy & Heaton, 1993). Sadly, dieting is largely unsuccessful and it has been estimated that the failure rate lies between 90% and 95% (Adkinson & Hubbard, 1994; Committee on Diet and Health, 1989). One author suggests that if a "cure from obesity is defined as reduction to ideal weight and maintenance of that weight for 5 years, a person is more likely to recover from cancer than from obesity" (Van Itallie, 1979, p.1289). Scholars have hypothesized that dieting and weight concerns have become so commonplace that weight has become the "lens through which experience is viewed" (Rodin, 1993).

Consequences of dieting are not only physiological but can be emotional as well. The success rate for long term weight loss maintenance is dismal (Adkinson & Hubbard, 1994). For this reason, many women who are constantly striving to lose weight and failing this endeavor may be emotionally damaged by their constant failure.

Hazards of dieting

Health care professionals are becoming increasingly aware that there are risks not only associated with obesity but with dieting practices as well. The detrimental effects of dieting range from the practice of bingeing to the controversial adverse effects of the phenomena of weight cycling (McCargar & Yeung, 1991; Polivy, 1996).

Bingeing. Bingeing has been connected to the practice of dieting. It has been estimated that 30% of obese patients seeking weight control treatment suffer from binge-eating disorder. This disorder is defined as an individual who partakes in recurrent binge eating but does not fit the diagnostic criteria of bulimia nervosa because of the absence of purging (Wilson, 1993). It is thought that dieting may cause bingeing as an individual's body tries to conserve its weight while the dieter struggles to reduce her caloric intake. (McCargar & Yeung, 1991). Webber (1994) examined the psychological characteristics of bingeing and non-bingeing obese women and found that bingers, regardless of weight, suffered from higher levels of depression and anxiety and lower levels of self-esteem than non-bingers.

Weight cycling. Weight cycling, or the cycle of weight loss and regain, has also been called the yo-yo syndrome. It is a phenomena not only experienced by some participants in weight loss programs, but elite athletes who face weight restrictions in their competitions (Brownell, 1989; McCargar & Yeung, 1991). There has been concern over the negative physical aspects of dieting, however the literature suggests that the benefits of moderate weight loss, regardless of the chance of weight cycling occurrence, can benefit the majority of individuals (The National Task Force on the Prevention and Treatment of Obesity, 1994; Wing, 1992).

Weight cycling has previously been identified as negatively affecting an individual's metabolism. It was believed that repeated dieting causes a "feast-famine" state thereby making the body more efficient at storing calories, in anticipation of the eventual caloric deprivation it will experience from the next diet (McCargar & Yeung, 1991). A meta-analysis of studies conducted on human subjects dispute this claim and suggest that there is no convincing evidence that weight cycling negatively affects metabolism (National Task Force on the Prevention and Treatment of Obesity, 1994). Studies suggest that weight cycling causes slower weight loss with subsequent diets (Blackburn, Wilson & Kanders, 1989; Steen, Oppliger, & Brownell, 1988), yet some studies dispute this claim (Beeson, Ray, Coxon & Kreitzman, 1989; Gray, Fisler & Bray, 1988; Van Dale & Saris, 1989).

Despite the perceived negative psychological consequences of repeated weight loss successes and failures, the National Task Force on the Prevention and Treatment of Obesity in the United States concluded that there is no convincing evidence that weight cycling is detrimental to body composition, metabolism, cardiovascular health or effectiveness of future weight loss initiatives. Though the Task Force does not believe there are serious long term consequences associated with the phenomena of weight cycling, they still recommend that individuals who are striving to lose weight attempt to do so by making long term lifestyle changes (The National Task Force on the Prevention and Treatment of Obesity, 1994).

Exercise

Exercise has been shown to be effective in both prevention and treatment of obesity. An isocaloric state is necessary to prevent weight gain. This means that energy expenditure must equal energy intake for an individual to maintain his or her weight (Blair, 1993). Thus, weight loss can occur when an individual expends more energy than he or she consumes. Most studies show that exercise alone produces modest weight loss between two or three kilograms (King & Tribble, 1991). However, there is debate about whether exercise may be a more significant contributor to weight loss and maintenance than current studies reveal. A main reason for this consideration is that morbidly obese people may have to exercise at such a low intensity that energy expenditure is a negligible contributor to their weight loss effort. It may be several months before an obese person can tolerate more intense exercise (Wood, 1984).

Though exercise may not play the most significant role in large amounts of weight loss, it has been shown to benefit overweight individuals. Physically active overweight adults suffer less morbidity and mortality than do their inactive counterparts (Blair, 1993). One study that evaluated the effects of 15 months of exercise followed by 14 months of exercise combined with low fat diet in four obese women found that thought the women remained overweight, their plasma glucose, insulin and most blood lipid levels were within normal range (Tremblay et al., 1991). This indicates that exercise may produce more important health benefits than simply weight loss.

Behavior modification

Behavior modification includes adjustment of eating and exercise patterns. This approach originally described changes in eating patterns only, however findings suggesting that over eating was often triggered by environmental cues caused this definition to expand. Self-monitoring is an important component of behavior modification (Foreyt & Goodrick, 1993). Studies have found that individuals who monitor their caloric intake and exercise activities lost more weight and maintained it better than those that did not monitor it (Kaymann, 1990; Perri, 1989). Because behavior modification is a treatment modality that often involves a variety of activities ranging from changing exercise behavior to eating habits, it is difficult to attribute weight loss successes to it alone (Foreyt, Goodrick & Gotto, 1981). A review of the literature performed by Foreyt and Goodrick (1993) showed average duration of treatment was 18 weeks and average weight losses were 9.9 kg. Attrition rates for this modality were less than 15% and a 52 week follow-up suggested that participants maintained 66% of their weight loss. Follow up studies at three and five years suggested a return to baseline weight (Foreyt & Goodrick, 1993).

Medication options

Diet and exercise are by far the most popular method of weight loss at the present time (Levy & Heaton, 1993). However, with the advent and popularization of prescription medications, the use of drugs is increasing (Weintraub, 1992; Wannamaker, 1997). It has been estimated that approximately 14% of the population in the United States is using prescription medications to lose weight, while 7% are using non-prescription medications (Levy & Heaton, 1993).

Non-prescription medications to assist in weight loss are available in most pharmacies, supermarkets and can be ordered through the mail. One of the more popular non-prescription medication is phenylpropanolamine. This medication may be found in products such as Dexatrim®, Prolamine®, and Acutrim 16-hour® in the United States (Popovich & Wood, 1997). Within Canada, this medication can only be found in a variety of non-prescription cough and cold medications (Canadian Pharmaceutical Association, 1996). This medication is an alpha- and beta-adrenoreceptor agonist and acts by increasing noradrenalin secretion from sympathetic nerve endings. The mechanism by which this drug acts as an anorexiant medication is unknown, however it is thought that it may activate post-synaptic alpha-1-adrenergic receptors in the medial hypothalamic nucleus, which in turn activates a human satiety mechanism (Doering, 1996). Another theory is that it increases energy by breaking down fat tissue which may accelerate weight loss (Popovich & Wood, 1997).

A meta-analysis of phenylpropanolamine clinical trials reports a net loss of 0.14kg/week as compared to placebo. The incidence of side effects is reported to be 19% compared to the placebo in which side effects occur at a rate of 14% (Greenway, 1993). Despite this relatively low incidence of side effects, there has been concern over case reports of adverse effects that include cerebral infarction, seizures, intracerebral hemorrhage and cardiac arrhythmias (Popovich & Wood,1997). Concern exists because these medications are accessible to the public without a prescription. Their non-prescription status may cause the public to perceive them to be safe and they may be inclined to take them in larger quantities than recommended.

Another popular ingredient in over-the-counter weight loss medications is benzocaine. This ingredient is present in a variety of medications for weight loss in Canada, most notably in the Canadian version of Dexatrim® (Canadian Pharmaceutical Association, 1996). The mechanism of action of benzocaine is its numbing of the oral mucosa when taken orally. Manufacturers claim that this, in turn, discourages snacking and decreases caloric intake. Benzocaine is considered to be relatively safe when less than 45 mg are consumed daily. Dosages greater than this may have the potential to impair swallowing and increase the chances of aspiration due to excessive anesthesia (Popovich & Wood, 1997).

Another product that is increasing in popularity is chromium picolinate. This product is generally available in pharmacies and health food stores but has not officially been recognized as a weight loss medication. It is thought that the drug impairs glucose tolerance. Chromium is thought to be part of a complex called GTF or glucose tolerance factor. The evidence for the use of chromium as a weight loss agent is anecdotal and is based on the fact that in chromium deficient tissue, chromium potentiates the incorporation of glucose into fatty cells and cholesterol (Popovich & Wood, 1997).

Other non-prescription products that have been used include syrup of ipecac and a variety of laxatives (Bailey, 1995; Popovich & Wood, 1997). The former is used to induce vomiting to prevent weight gain. Its abuse has been shown to produce cardiotoxic effects such as atrial fibrillation, conduction disturbances, bradycardia, hypotension and fatal myocarditis (Popovich & Wood, 1997). Laxative abuse is widespread among individuals with eating disorders with 60% of these patients having used laxatives and 20% of patients using them daily. Fast-acting irritant laxatives such as phenolphthalein are the most commonly used purging agents. Side effects of long term usage of these agents include lazy bowel syndrome and serious electrolyte and fluid disturbances (Bailey, 1995).

Prescription medications are becoming more popular for the purpose of weight loss. These medications fall into a variety of classes. The first of these can be classed as noradrenergic drugs which include diethylpropion (Tenuate®, Tenuate Dospan®), mazindol (Sanorex®) and phentermine (Fastin®, Ionamin®). These medications are related to the non-prescription preparation of phenylpropanolamine and are classed as indirect acting sympathomimetic amines. It is thought that these medications suppress appetite by stimulating the satiety centres in the limbic and hypothalamic regions of the brain (Popovich & Wood, 1997).

Common side effects of these medications include irritability, restlessness, nervousness, insomnia and euphoria. Less common side effects include blurred vision, heart palpitations, impotence and dizziness or lightheadedness (McEvoy, 1996; Popovich & Wood, 1997). Once medications are discontinued and the stimulant effects diminish, patients may experience fatigue, weakness, drowsiness and depression. Though these medications have been modified from the parent amphetamine compound to decrease abuse potential, while maintaining their appetite suppressant effects, there is still concern about their long term usage (Popovich & Wood, 1997)

The efficacy of these medications has focused on short-term clinical trials because of the aforementioned potential for abuse. In the 1970's, the Federal Food and Drug Administration in the United States analyzed 105 new drug applications for anorexiant medications. The applications included results from almost 10 000 patients who had participated in studies ranging from four to six weeks testing the efficacy of the medications. On average, the patients receiving the active medications lost 0.25 kg/week more than those receiving placebo (Bray, 1993).

The second class of prescription medications involved in weight loss are the serotonergic drugs. This class of medications includes d,l-fenfluramine (Ponderal®, Pondimin®), d-fenfluramine (Redux®) and, though not indicated as an anorexiant, fluoxetine (Prozac®) (Bray, 1993).

Fenfluramine has the dual action of releasing serotonin from nerve endings while inhibiting its reuptake which is believed to produce an increase of serotonin in the neural cleft that then decreases appetite (Bray, 1993). The most common side effect of fenfluramine is its ability to produce CNS depression, diarrhea, drowsiness and dry mouth. There seems to be little concern about this medication's abuse potential, although there have been reports of doses ranging between 80 to 400 mg causing euphoria, derealization and perceptual changes (Popovich & Wood, 1997).

The d-isomer of fenfluramine, dexfenfluramine (Redux®), was the most recent addition in the arsenal of medications used to fight obesity. The controversy surrounding it and its close relation, fenfluramine, is the potential to cause primary pulmonary hypertension. An alarming case-control study found the use of these agents for greater than 3 months caused a 23-fold risk (95% CI, 6.9 to 77.7) of developing this condition (Abenheim, et al., 1996). Some researchers expressed the concern that, though the rate of primary pulmonary hypertension in the normal population was 1 to 2 cases per million people, and taking fenfluramines may only raise the rate to 23 to 46 cases per million people, widespread use of this drug will cause the rate to increase dramatically (Kushner, 1997).

Another concern is the FDA's contention that dexfenfluramine has the theoretical risk of causing brain damage. This contention stems from studies that have been completed on rodents and primates (Rodgers, 1996). The damage occurs when there is a massive release of serotonin from the neurons. The serotonin is then taken up by the neurons and metabolized so quickly that the neuron is damaged. The fact that d,l-fenfluramine has been on the market for a prolonged period of time without such outcomes occurring provides some assurances. However, some scientists believe that the presence of the l-enantiomer may protect against the neuronal damage (Popovich & Wood, 1997).

Clinical trials examining the efficacy of the fenfluramines alone suggest that weight loss does occur. One trial administered fenfluramine for one year followed by a second year of placebo and found that weight loss (10-11 kg) plateaued in the eight to twelfth month of treatment and remained constant for the remainder of the year. Once the medication was discontinued, weight was regained (Bray, York & Delaney, 1992; Maddox & Liederman, 1969). A year-long study that compared dexfenfluramine to placebo suggested that after an initial weight loss of 11%, the loss plateaued, and the placebo group plateaued at 8% weight loss (Bray, York & Delaney, 1992).

Another serotonergic drug that has the possibility of becoming a medication used to treat obesity is fluoxetine (Prozac®). The discovery of this medication as a possible treatment for obesity came from the observation during clinical trials that subjects were losing weight (Bray, 1993). It seems that 60mg per day is an effective dose for weight loss, however the manufacturer has no intention to seek approval for the use of this drug for obesity. The higher dose required to treat obesity means that there is an increased chance of side effects such as nervousness, drowsiness and diarrhea. Weight loss slows after the first few months of therapy and once the drug is discontinued, weight gain usually occurs (Popovich & Wood, 1997).

A novel approach in the treatment of obesity is the combination known as Fen-phen. This combination is fenfluramine (60mg) and phentermine (15 mg). Usually, the phentermine is taken in the morning and the fenfluramine is taken in the evening or before bed. The use of this drug combination was originally described by Weintraub, et al. (1992) who performed a randomized controlled trial with 121 subjects who were 30 to 80% above their ideal body weights. The subjects were randomized into placebo and treatment groups with each group receiving an exercise, diet and behavior modification program. At week 34 the treatment group lost an average of 32 pounds, while the control group lost 9 pounds. The weight loss occurred within the first 24 weeks of therapy (Weintraub et al., 1992)

In the final phase of the study, weeks 190 to 210, the remaining 48 participants in the study were taken off the medication. All subjects had difficulty maintaining weight loss once the medication was discontinued. (Weintraub et al., 1992). This finding supports assertions of previous weight control intervention studies in humans that weight returns to its original state when the intervention is discontinued (Popovich & Wood, 1997).

The side effect most commonly experienced in individuals using this combination was dry mouth which can diminish with increased treatment time. Gastrointestinal symptoms such as abdominal pain, diarrhea, metallic taste and constipation were also common symptoms. Central nervous system effects that included dizziness, drowsiness, sadness and increased dreaming also occurred. All side effects appeared to diminish after a few weeks of treatment. If the patients were stopped and then restarted on the medications, the side effects recurred (Weintraub, 1992).

Weintraub's series of studies about Fen-phen suggested that, though less than 50% of those initially enrolled continued with the medications, the medications in combination with other interventions were successful in treating obesity. The studies also demonstrated that the medications remained effective for three and a half years without the incidence of severe side effects. These studies suggest that drug therapy to treat obesity be considered a long term solution for the ailment and that there is little abuse potential for appetite-suppressant drugs and that medications, when used in combination with lifestyle changes, are effective in weight loss and maintenance (Weintraub, 1992).

As with both fenfluramine and dexfenfluramine, there is concern about the development of primary pulmonary hypertension when the Fen-phen combination is used (Abenheim et al., 1996). Recently, concern about the development of valvular heart disease subsequent to the use of this combination has been reported. Case reports of 24 women, all taking Fen-phen were found to have similar clinical features including unusual valvular morphology and regurgitation. Eight of the twenty-four women also developed pulmonary hypertension. Cardiac surgery required to treat five of the women revealed heart valves that were glistening white in appearance. The finding that each of the women had consumed the Fen-phen combination was described as a "serendipitous connection" by the researchers and indicates the need for further research in this area (Connolly et al., 1997). However, in September, 1997, dexfenfluramine and fenfluramine were removed from the market by their respective manufacturers due to concerns over heart valve defects that were recently reported. The FDA stated that the medications present an unacceptable risk to patients (FDA Website, personal communication, September 16,1997).

There are a variety of non-prescription and prescription medication options available to individuals who desire weight loss. These medications vary in terms of mechanism of action, side effects and efficacy. Prescription medications are becoming increasingly popular and have been shown to be effective in achieving short-term weight loss. Unfortunately, these medications are not without their consequences. Recent studies have indicated that there may be serious concerns related to their use including heart valve defects and primary pulmonary hypertension.

Recent debates

There has been much debate in the literature about the dieting, societal influences and the medicalization of obesity. It is important to mention these debates as they place a context on why individuals may be driven to lose or gain weight. It also provides insight into the pressures that some women face to attain the "ideal' body.

Medicalization of obesity

Some controversy has arisen regarding the medical profession and its views on obesity and weight control. Studies show that some physicians possess negative attitudes about their obese patients. Unfortunately, physicians' negative views about their obese patients stem more from personal beliefs than from medical training. (Klein, Najman, Kohrman & Munro, 1982; Maiman, Wang, Becker, Finlay & Simonson, 1979). Physicians are in positions of power in the health care system and their beliefs about obesity have unjustly placed obesity as a medical condition (Crawford, 1977; Crawford, 1980).

Medicalization of obesity refers to the medical profession and society defining it as a deviant behavior and a sickness (Zola, 1972). It is important to realize that until the turn of the century, the medical profession did not consider mild obesity to be within the medical realm. It was not until the New York Life Insurance Company cited their heavier clients had shorter life expectancies than those who were slimmer, that the medical profession begin to step in. Once this occurred, desirable weights for individuals began to decrease and society saw an increased involvement from health care professionals on this issue. In 1960, obesity was termed a disease and the measurement of body weight during physical examinations was added (Brumberg, 1989; Ritenbaugh, 1982). Interestingly, this event coincides with the increasingly slim view of the ideal feminine body during this time period (Mazur, 1986).

There is little debate about the health risks that individuals who are morbidly obese face. However, it is unclear whether individuals who are mild to moderately obese face the same risks (Marchessault, 1991). Some experts argue that the studies linking cardiovascular disease to obesity are inconclusive (Stallones, 1985). In addition, obesity is a protective factor for cancers such as premenopausal breast cancer, lung, stomach and colon cancer. Thus, obesity may be linked with an increase in risk factors for certain diseases, but there is little evidence that mild to moderate obesity contributes to increased mortality rates (Ernsberger & Haskiw, 1987).

Some researchers suggest that risks associated with dieting have been unfairly attributed to health consequences of obesity. For example, a study that showed a 25% mortality rate of obese men who had perished while attempting to lose weight through fasting was attributed to obesity rather than the act of fasting itself (Drenick, Bale, Seltzer & Johnson, 1980).

The anti-dieting movement

The roots of an anti-dieting movement can be traced to feminist concepts which encourage women's self acceptance (Orbach, 1978) as well as the mounting evidence of the negative physiological consequences of dieting (McCargar & Yeung, 1991). Stemming from this movement are a variety of books and magazines now available in the popular literature. Such works include BBW - a magazine for large size women, No Fat Chicks - a book illustrating the negative effects of dieting in women's lives, and Fat Is a Feminist Issue. An example of popular literature that has arisen during the anti-dieting movement is the book, No Fat Chicks. The author argues that the weight loss industry is a 40 billion dollar industry that forces many women to believe that obesity is synonymous with being ugly, lazy, mean and stupid, while being thin insures that women will attain their dreams and live happily ever after. She asserts that the weight loss industry exerts negative influences on obese and thin individuals alike to undermine their self-esteem and make them more pliable consumers of the weight loss industry. These influences, unfortunately, have not stopped at body image but are now believed to be the root causes of prejudice toward obese people that affects employment, health care, clothing, education and housing (Poulton, 1996).

The withdrawal of the fenfluramines

At the initiation of this project, anorexiant medications were increasing in popularity with the recent approval of dexfenfluramine and the renewed vigor of fenfluramine in its usage as part of the Fen-phen combination. On July 8, 1997, the Federal Food and Drug Administration (FDA) in the United States issued warnings regarding the association of the Fen-phen combination with cardiac valve abnormalities. This warning prompted the issuing of a health advisory to over 700 000 health care professionals indicating the potential consequences of taking these products. By August 22, 1997, the FDA had received an additional 58 reports of heart valve damage from 23 states (FDA Website, personal communication, September 16, 1997). As of September 15, 1997, both dexfenfluramine and fenfluramine have been withdrawn from the market by their respective manufacturers in North America due to concerns about the incidence of heart valve abnormalities in patients that have taken the medication. The basis for this withdrawal stems from 24 cases of rare valvular dysfunction in women who had taken the Fen-phen therapy (Connolly et al., 1997; FDA Website, personal communication, September 16, 1997).

At the time of writing, the manufacturers have voluntarily withdrawn their products stating that it is strictly a "precautionary measure" (Servier, personal communication, September 17, 1997). One can only assume that further investigation will take place and a decision will be made whether these medications will remain available to patients in the future. All other anorexiant medications remain available at this time (FDA Website, personal communication, September 16, 1997). The American Obesity Association is concerned with a lack of treatment options that are available to treat obesity, a disease that is responsible for the deaths of 300 000 Americans each year (Fox, M. (Reuters), personal communication, September 16, 1997).

In summary, there are heated debates about the health consequences of obesity and dieting that have emerged in popular and scientific literature. The use of anorexiant medications, possible side effects, costs and benefits of taking the medication have been studied. One area that has been overlooked is the women's experiences of taking the medications. Because of the lack of data available on the process of taking anorexiant medications, grounded theory was chosen to generate a description of the women's experiences.

Grounded Theory

Qualitative research has been said to help us "make sense of reality, describe and explain the social world, and to develop explanatory models and theories" (Morse & Field, 1995, p.1). To this end, grounded theory is one methodology within the realm of qualitative research has been developed in an effort to generate theory inductively (Morse & Field, 1995).

Grounded theory was initially developed by Glaser and Strauss in 1967 to develop explanatory models of human behavior. The method's underpinning is the phenomena of symbolic interactionism which stresses that people construct the reality around them through their interactions with others. An explanatory model of human behavior, or grounded theory, is developed through a process of interviews and observations. In addition, the process of discovering grounded theory requires that sampling, data collection and analysis occur simultaneously to ensure that the emerging theory is descriptive and "grounded" in the experiences of the informants (Morse & Field, 1995).

There are three main functions that theory generated inductively can serve within a profession. The first of these functions is that a model can be applied clinically to the setting where it was developed or the theory may be applied to another setting. An example of such an application would be physicians using the model to plan lifestyle education interventions when patients may require them. Second, the rich description that such a theory provides places a context on what patient's may be experiencing in a certain setting. In the present study, a theory of what women experience while on anorexiant medications may elucidate women's struggles with the decision to be placed on these medications. Third, the theory may be used in subsequent quantitative research where the theory can be applied to a large population of women taking these medications to determine if large samples experience the same process. In this way a model that has been developed using qualitative methodology can be validated quantitatively. Alternatively, a quantitative study can triangulate a qualitative one to either place context on quantitative data or explain quantitative results (Morse & Field, 1995)

Review of relevant studies

Aside from studies that identified the physical aspects of weight loss with medications, there was no listing of qualitative studies describing people who have taken prescription medications to lose weight.

One grounded theory study explored dieters' experiences with weight loss in an organized weight loss program. The researcher completed over 200 hours of observation, at well known weight loss centres during their weigh-ins, classes and seminars. In addition, interviews were conducted with 13 dieters and documents, including manuals, newsletters and magazines were reviewed (Johnson, 1990).

Johnson found that the main process underlying successful weight loss and maintenance was restructuring. Restructuring represents an ongoing need for alteration in the dieter's life, first to lose and then to maintain the weight. The concept of restructuring actually had three phases including gaining a sense of control, changing perspective and integrating an identity and/or new way of life (Johnson, 1990).

The first stage was "gaining a sense of control". This stage described the need for the dieter to be in charge of food. Gaining a sense of control involved a variety of emotional highs and lows until the dieter believed that he or she was in control. This was accomplished by reorganizing themselves and their environment in an effort to lose the weight in ways such as joining the weight loss program, keeping busy and creating an environment conducive to weight loss. Coming to terms with self was the final part of stage one and it involved accepting responsibility for making changes in lifestyle (Johnson, 1990).

The second stage was changing perspective which reflected the altered perceptions of the dieter as he or she moved through the process of weight loss. "Meeting one's needs" was an important phase of this stage where dieters began to rethink their relationships and realize that their hunger for food may have reflected their hunger in other aspects of their lives. An example of this phase would be the realization that they were overly accommodating in their interpersonal relationships to compensate for their obesity. The "meaning of success and failure" was changed during this stage and the dieter learned to forgive herself for the occasional indulgence or weight gain. At this time, the dieter uncovered the origins of her "eating style and dieting". For many, this part of the process involved recognizing how eating habits evolved throughout childhood. An example of this phase was one woman's recognition of how she felt forced to eat quickly when she was a child to ensure that she had enough food to survive. The final part was the recognition of "overweight as a chronic disease". Many of the dieters believed obesity was a disease similar to that of alcoholism and recognizing this allowed them to adopt skills that would prevent their relapse (Johnson, 1990).

The third and final stage of restructuring was integrating a new identity and/or way of life. This final stage involved integrating the new values and behavior patterns discovered in the first two stages of restructuring with the dieter's former beliefs and habits. This stage involved testing in which the dieter found the limits of his or her food intake. Finding this limit lent mastery and control to the dieter. Identification was also carried out in which the individual identified herself as a thin person. Once the weight loss goal was achieved the dieter reconciled her perception of herself to the new "body" that she saw in the mirror. Finally support, from family and friends, facilitated identification (Johnson, 1990).

The actual stages that were discussed progressed in a step-wise fashion for the dieters, however it was a complex process that often involved experiencing some stages simultaneously or falling back from one stage to the previous one. Progression through these stages appeared to be dependent on whether the dieter could master the stages he or she experienced. The author cautioned health care professionals to define success in weight loss beyond the actual shedding of pounds and think of it as a process rather than an outcome. She suggested that future research attempt to broaden the model by including individuals from different cultures and socioeconomic backgrounds as well as explore its application to other lifestyle changes, such as smoking cessation (Johnson, 1990).

Control

Johnson's (1990) study of dieters suggested that an important process in weight loss was "gaining a sense of control". For this reason, the issue of control should be explored to understand what role it may play in health and dieting.

Researchers have related health to a variety of determinants such as socioeconomic status, education and early childhood development (Federal, Provincial and Territorial Advisory Committee on Population Health, 1994). Increasingly, researchers and practitioners have linked a sense of powerlessness or a lack of empowerment with poor health. This finding suggests that communities who experience powerlessness or a lack of control over their destiny will experience an increased risk of poor health (Wallerstein, 1992).

On an individual level, control has been researched as a possible “health-enhancer” (Wallerstein, 1992). People with an internal locus of control have been associated with better health than those with an external locus of control due to their better health habits and compliance (Seeman & Seeman, 1992). People with an internal locus of control believe that positive outcomes are due to his or her own self-control, whereas someone with an external locus of control believes that outcomes are due to chance, fate or under the control of others (Nir & Neumann, 1995). Internal and external locus of control has been examined in relationship to the results of weight loss and maintenance. Studies reveal that those individuals who have an internal locus of control are more successful at losing weight and are more likely to maintain weight loss for a longer period of time (Kincey, 1981; Nir & Neumann, 1995).

Both research and common sense suggests that perceived control over aspects of one’s life can differ between individuals. For this reason, it is safe to assume that perceived control is not a static concept but one which vacillates depending on one’s experiences. It is believed that control beliefs and their complementary actions can create a self-perpetuating cycle. For example, people who believe that they have control over weight loss, act in certain ways that are more likely to ensure successful weight loss. This success will then confirm that they had control over weight loss. The positive cycle of weight loss then begins. Of course, the reverse is also possible. If an individual perceives that she has little control over successful weight loss, she is less likely to successfully implement changes in lifestyle that would ensure weight loss success (Skinner, 1995).

Self-efficacy is also linked to the concept of control. Self-efficacy can be defined as the belief that one can successfully execute a behavior to achieve a certain outcome (Bandura, 1977). Intervention studies that examine people who have increased their self-efficacy have demonstrated better compliance and appear to choose healthier behaviors than controls (O'Leary, 1985; Strecher, DeVellis, Becker & Rosenstock, 1986). It can be hypothesized that self-efficacy in dieting began to increase when the dieters in Johnson's study (1990) began to gain a sense of control thereby curbing their eating habits and experiencing successful weight loss.

Finally, control has also been examined as a sense of coherence about life. Sense of coherence is an orientation toward the world which "perceives it on a continuum as comprehensible, manageable and meaningful" (Antonovsky, 1996, p. 15). This concept shifts away from the control literature in that it means a person with a high sense of coherence believes that he or she is interacting well, not controlling, their environment (Wallerstein, 1992). For example, when faced with a stressor, a person with a high sense of coherence will be motivated to cope (meaningfulness), believe that she understood the challenge (comprehensibility) and believe that the resources for coping are available to her (manageablity) (Antonovsky, 1996). In the case of weight loss, an obese woman who has suffered many dieting failures may have a low sense of coherence. If this is the case, she may not feel that she has the resources to cope with a weight loss initiative. The lack of resources could refer to her lack of money to buy lower fat alternatives or to her belief that she does not have the ability to initiate life strategies to achieve weight loss.

In summary, control can be viewed as an important factor in weight loss initiatives. Self-efficacy and perceived control seem to play a role in the success in weight loss. If a woman believes she has control over the success of weight loss, it is more likely that she will succeed at that initiative. The concept of sense of coherence is related to control. If a woman feels that the weight loss initiative is manageable to her, she is more likely to implement the changes necessary to lose weight.

Experiences of the researcher

The decision to explore the issue of women's experiences with anorexiant medications occurred for several reasons. Firstly, anorexiant medications appeared to be receiving increasing media attention with the use of Fen-phen and the imminent release of dexfenfluramine on the Canadian market. Secondly, there were large gaps in the literature regarding the experiences of women who used anorexiant medications. Finally, the topic was of great interest to me as I had had professional and personal experiences with anorexiant medications in the past.

My experience as a practicing community pharmacist ensured that the medical and physiologic aspects of the medications could be easily understood. In addition, having taken the medication within the past two years allowed me to relate to the physical impact of the medications, as well as the psychological components of weight loss experiences. I had taken the medications for a period of six weeks in the spring of 1996 and lost approximately 15 pounds. Once the medication was discontinued, I did not make lifestyle choices and I regained the weight. This caused me to have negative views about the medications and I felt disillusioned about the benefits of taking them to treat obesity.

At the initiation of the study, I strove to ensure that my experiences were used only to help me build rapport with the informants and understand the context of their experiences. However, to avoid any chance of my views biasing the study results, mechanisms, such as fieldnotes and memos, were utilized. In this manner, the components of trustworthiness were maintained.

In summary, weight control is a prominent aspect in the lives of many women for reasons that include health, body image and societal pressure. Many methods have been employed to achieve weight loss that range from lifestyle modification to medications. Along with each of these options there are both risks and benefits that must be considered by each woman. Rarely is weight loss maintained over long periods of time and many have begun to question the futility of trying to achieve an ideal body.

Chapter 3

Method

Grounded theory methodology was employed in the collection and analysis of data from 16 interviews with nine women who were currently taking or have taken anorexiant medications. The data were analyzed to elucidate an experiential process of women who chose to use anorexiant medications.

Recruitment

Participants for this study were recruited using advertisements in community newspapers and postings in recreational areas, such as community swimming pools, and the University campus (see Appendix A). Participants in the study were required to be 18 years of age or older to provide consent for participation in the study. The informants were also required to be female. Reasons for this were two-fold. As discussed in the review of the literature, women tend to have increased social pressures to become and remain thin (Allan, 1994; Rodin, 1993). This pressure, in turn, means that there are more women participating in weight loss activities than men (Levy & Heaton, 1993; Serdula et al., 1993). The pressures that women experience to lose weight may be different than those men experience, therefore the sample was limited to women to capture their unique views on the subject of weight loss using anorexiant medications (Rodin, 1993). The informants were also required to be either currently taking prescription anorexiant medications or have taken them in the past year because this time frame would ensure that the informants would be able to clearly recount their experiences with the medications.

Data Collection

Data was collected using semi-structured interviews at a convenient location for the informant. Semi-structured interviews are ideal for situations where the researcher has specific questions to be addressed, while still allowing the informant to respond freely to questions and allow the interview to occur in a conversational format (Morse & Field, 1995). An initial interview guide was developed and then critiqued by the researcher's supervisory committee at the time of the proposal defense. Changes were made to the guide (Appendix B) that were amenable to both the committee and the researcher previous to submitting the project proposal to the ethics review committee. The final draft of interview guide was developed with 3 specific research issues in mind. These included what influenced women to initiate treatment of obesity with prescription medication, what they experienced while on the medications, and how women adapted to life without the medications.

The interviews ranged from 45 to 90 minutes in length and were repeated twice over a period of approximately 3 months. The purpose of the first interview was to establish a relationship with the subject and gain an understanding of her experiences with weight control up to that point in time. Initial interviews were audio-recorded and transcribed verbatim. The purpose of the second interview was three-fold. Firstly, the second interview allowed the opportunity for the subject to speak of any changes in her weight control experiences since the first interview. Secondly, the researcher reviewed information gleaned from the initial interviews about the experiential process of using anorexiant medications with the subjects and received feedback about the emerging model. Feedback regarding the emerging theory was requested by the researcher at the second interview to ensure that the theory was remaining true to the informants experiences (Strauss & Corbin, 1990). Finally, the second interview allowed the researcher to revisit points from the first interview that required clarification. Second interviews were audio-taped and transcribed verbatim.

At the conclusion of the initial interview a demographic questionnaire (Appendix C) was completed by each subject. The questionnaire included demographic information such as the subject's age, marital status, education and occupation. Information about previous diets that have been used and other diet support groups that were attended were also collected.

The interviewer maintained fieldnotes of her observations and thoughts about each interview. Fieldnotes were also used to record information that the subject presented during the initial phone contact and comments made after the close of the interview that were not audio-recorded. Some subjects provided written information to the researcher. One subject gave the researcher a written history of her use of medications that was annotated with other life events. Another subject provided a detailed patient information sheet that was provided by her physician for her own reference about dosing and side-effects of the Fen-phen regimen.

Data Analysis

Data analysis was conducted using grounded theory methodology to reveal the meaning of the women's experiences with anorexiant medications. Grounded theory uses the process of constant comparative method to elucidate patterns within the interview data (Glaser & Strauss, 1967). Strauss and Corbin (1990) have outlined specific procedures for discovering grounded theory within a data set which provided a general framework for the data analysis. All data were analyzed on a line by line basis initially.

The first step of the data analysis was open coding. Each idea discovered within the data was given a conceptual label to represent or describe it. Once the labeling had been completed, the researcher grouped these labels into categories. For example, activities such as buying vegetables, low fat milk and potato chips were place under the category of "buying smarter".

The second stage of data analysis was axial coding. Essentially, the categories resulting from the open coding procedure were linked together in a variety of sequences to further explore the relationships among them (Strauss & Corbin, 1990). An example of axial coding was linking activities such as buying smarter, exercising, sensible eating and allowing indulgences under the more inclusive category or theme called life strategies.

The third and final stage of data analysis was to complete the process of selective coding. It was at this stage that the grounded theory was developed. The process was initiated when a core category was selected. A core category is a central phenomena to which all the other categories are related. It has been described as the "cement in putting together - and keeping together properly - all the components in the theory" (Strauss & Corbin, 1990, p. 124). Once the core category was discovered, the researcher validated its relationship with other categories by ensuring that the core category was related to each component of the theory (Strauss & Corbin, 1990).

Memos were used by the researcher to document her thoughts throughout the process of interviewing and analysis. In addition, memos were used as a means of documenting ideas, categories and themes within the data as well as relationships among the categories being explored. Operational notes were also utilized to help the researcher deal with issues that had arisen through the interview and coding process. The operational notes identified sampling issues and notes for follow-up interviews (Strauss & Corbin, 1990).

Each woman's experience was reviewed for any differences and similarities to the emerging theory. Variations from the theory were identified and either incorporated into the theory or counted as negative cases (Strauss & Corbin, 1990). In addition, the researcher examined comments received from the informants in the second interview regarding their opinions of the emerging model. This assured that the final model described would incorporate the informants' experiences.

Theoretical Sampling

Initial volunteers for this study were women between 40 and 60 years of age. During the analysis of interview data, it was discovered that these women represented only one example of women who may take anorexiant medications because they were older and sedentary. To generate a volunteer sample of women who tended to be younger and more active, advertisements were placed in recreational areas. These viewpoints from women at different stages of life allowed the theory that evolved to be more rich and descriptive. After approximately 22 hours of interviews with nine women, no new themes were emerging and data saturation was evident. Selective coding was then completed to elucidate a core category for the emerging model.

Trustworthiness

Qualitative research possesses four aspects which must be met to ensure rigor or trustworthiness in the project. These aspects are: truth value, applicability, consistency, and neutrality. Truth value or credibility refers to the description or interpretation of a person's experience that remains truthful to the story that has been told. This aspect can be compared to the concept of internal validity in quantitative research (Sandelowski, 1986). Credibility was achieved by discussion of data analysis with the supervisor, validating the emerging theory in the secondary interview and documentation of the researcher's thoughts in her field notes to reveal biases.

Applicability refers to the criterion used to determine whether the theory can be applied to other groups or individuals. Applicability is similar to the concept of generalizability in the quantitative research paradigm. Because qualitative research "emphasizes the uniqueness of human situations and the importance of experiences that are not necessarily accessible to validation" (Sandelowski, 1986), variations in the subjects' experiences were sought.

Consistency emphasizes whether the findings would be consistent if the project were repeated, similar to the concept of reliability in quantitative research. In order to meet the criteria of consistency, each subject's experience with anorexiant medications was represented in the findings, while recognizing the limitations of a volunteer sample (Morse & Field, 1995). Guba and Lincoln (1981) suggested that auditability is one way in which consistency in the research be evaluated. For this reason, an audit trail was maintained that documented the decisions made by the researcher throughout the project (Sandelowski, 1986).

The final aspect needed to assure trustworthiness in the project was the aspect of neutrality. Neutrality refers to freedom from bias in the research project. Guba and Lincoln (1981) have suggested that confirmability be the criterion of neutrality in qualitative research. Confirmability is assured by a variety of mechanisms that provide feedback on the researcher's findings and interpretation, recognizing that the nature of qualitative research reflects the researcher's views as well as the phenomena being studied (Sandelowski, 1986). Neutrality was achieved in this study when the project met the criteria of truth value, applicability and consistency. In addition, the researcher's biases were recorded within the fieldnotes to ensure that they were recognized during the data analysis phase of the project.

Ethical Considerations

Ethical approval was for this study was granted by the University of Alberta's Dentistry/Pharmacy Ethical Review Committee. Consent of the participants (Appendix D) was obtained prior to the initiation of the first interview. At this time, it was explained to the participants that they were not obligated to answer each question and that they may withdraw from the study at any time without penalty.

Confidentiality was maintained by removing all identifying characteristics from the transcripts. Transcripts were coded to link them with the demographic questionnaire using a procedure known only to the researcher. All information including fieldnotes, transcripts, questionnaires, memos and diaries were kept in a locked cabinet with access only available to the researcher and her supervisor.

CHAPTER FOUR

FINDINGS

Analysis of the interviews with women who were taking or had previously taken prescription medications to treat obesity resulted in a process that women experience (a) when they decided to commence the medications, (b) while they were on the medications, and (c) when the medications have been discontinued. Initially, the sample of women will be described and then a description of the process they experienced from the time they decided to commence pharmacologic therapy to the final stage of adapting to life without the medications. Throughout the description of the process regarding use of anorexiant medications, experiences from the informants' lives will be used to illustrate and understand their contextual experiences. When there are several quotations from different individuals within the same section, they are separated by one line.

Sample

Nine women were interviewed during the life of this study. Eight of these women met the eligibility criteria. One informant fell outside the eligibility criteria as she had taken anorexiant medications approximately 3 years previously. Because theoretical sampling was used to select subjects for this study, it was decided that she could be included because of her extensive experience with anorexiant medications (i.e., over 15 years of intermittent usage). It was felt that her recollection of the events surrounding the use of the anorexiant drugs would be a valuable, perhaps different, contribution to the emerging theory (Morse & Field, 1995).

The women ranged in age from 23 to 60, with the majority of the women being over 35 years of age. Their education ranged from Grade 12 to the completion of a post-graduate degree. Seven of the nine women had at least one child and four were currently married, three were divorced, one was widowed and one had never married. Every informant had attempted some form of weight loss previous to the initiation of the medications whether it be a private initiative or participation in an organized weight loss program such as Weight Watchers.

At the time of the initial interview one woman had recently begun taking anorexiant medications, two had been taking the medications for greater than six months, one had discontinued the medications approximately 3 years ago and five had discontinued the medications within the past year. At the time of the second interview, each of the women who had not been on medications at the time of the first interview remained without medications with four of the six seriously considering beginning the medications again. Those who were on medications at the time of the first interview remained on them, however one individual changed from the Fen-phen combination to Redux.

The Process - Bridging the Gap

Analysis revealed the core category or central phenomenon experienced by the women was Bridging the Gap. The experience of taking anorexiant medications allowed the women to "Bridge the Gap" between the previous experiences of being obese and out of control in their eating habits to adopting more healthful lifestyles that assisted them in continuing or maintaining their desired weight loss.

There were three phases evident in the process: (1) reaching a space, (2) negotiating the bridge and (3) achieving a balance (see Figure 1). Reaching a space is the phase in which the women decide to be placed on the medications. This phase is complex as it includes internal as well as external pressures to lose weight. The second phase is

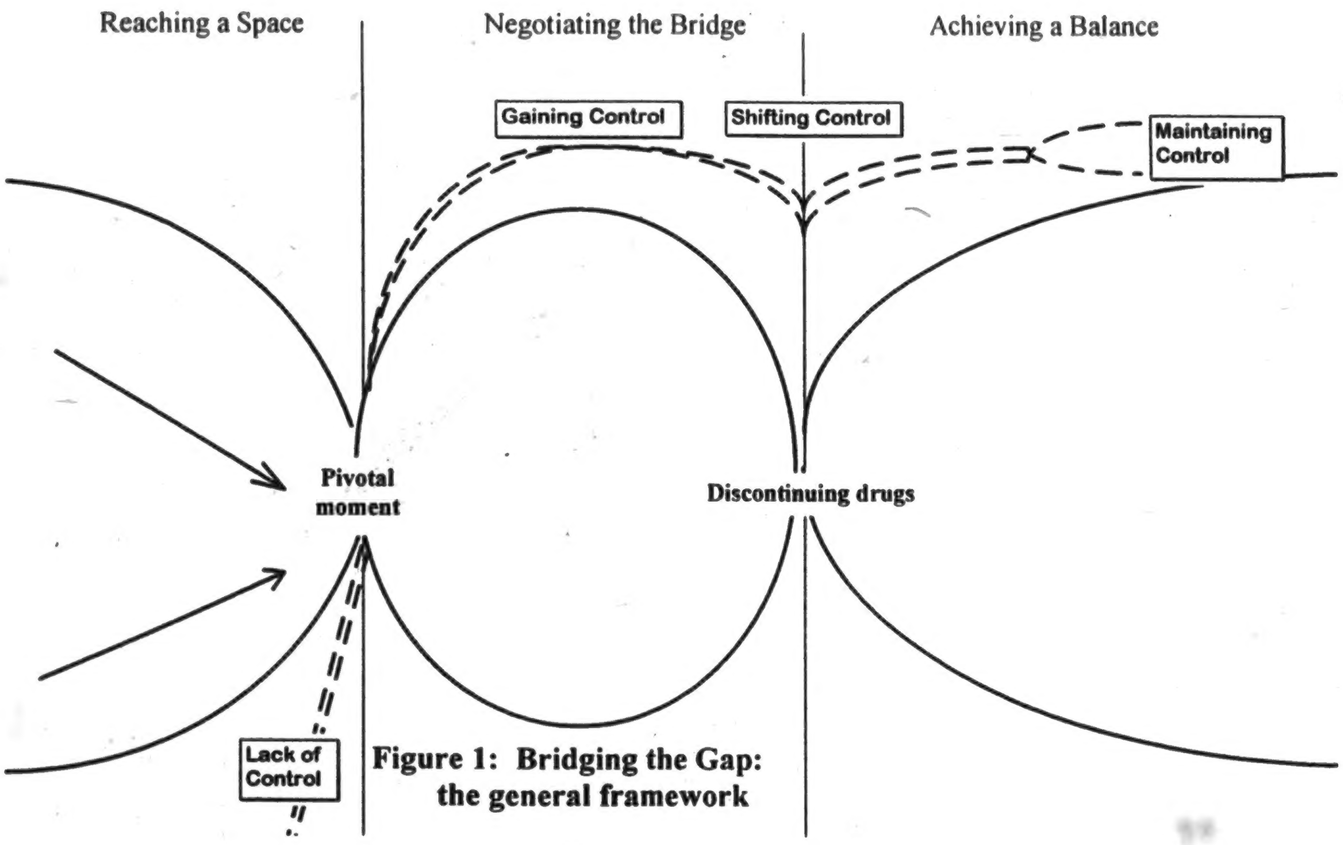

Figure 1: Bridging the Gap: the general framework

negotiating the bridge where women begin to take the medications. This phase has both positive and negative aspects that are represented by the upper and lower arcs of the model, respectively. The final phase of the process is achieving a balance where the women have discontinued their medications and have begun to adjust to life without them to maintain weight loss. The stages are represented by solid arcs to signify two issues. First, there may be significant interaction between the categories within a stage as weight control is not a linear process. Second, solid lines are used in the stages of the model to differentiate these issues from the complementary wave of control that occurs throughout Bridging the Gap.

Another important component of Bridging the Gap is the wave of control present throughout the model that is indicated by the paired, dotted lines. The wave of control began with the women lacking control over their weight issues in the first phase, reaching a space. Once the women began to take the medications, they began to gain control over their weight issues and other aspects of their lives in some cases. At the time the medications were discontinued the women shifted the control that the medications gave them during their weight loss initiative to themselves. For example, women began to substitute healthier lifestyle choices to maintain weight for the medications. After this critical point where the control is shifted to themselves, the women maintain control over their weight loss issues by remaining in the final phase, achieving a balance. The dotted line used to indicate the wave of control does not imply that the wave is a less important concept than those represented by the solid lines. It reflects the variability and uncertainty that can occur as the women struggle with the issue of control in their weight loss initiative. The separation of the line prior to maintaining control indicates the act of maintaining control to be one fraught with some uncertainty and successes and failures. It is meant to imply that the maintenance of control is not an easy process, but one that may be constantly renegotiated in the phase, achieving a balance.

Bridging the Gap was considered the core category of the weight loss initiative as it signified the movement into the part of their lives where the women had gained control over their weight and were taking steps to assure that this weight loss was maintained. Different weight loss initiatives would not have allowed the women to be liberated from their need of food in the same way that the medication did. The medication, by acting physiologically, eliminated the women's desire for food whereas other methods would require much restraint to decrease food intake. For example, if an organized weight loss program, a commercially available meal replacement diet or a program created individually by the dieter were utilized, the person could still experience the phases reaching a space and achieving a balance. However, they would not experience negotiating the bridge as the medication decreased food focus physiologically by unique mechanisms.

In some cases, the medication allowed the women to experience for the first time what it would be like to not think about food constantly. This decrease in food focus allowed them to lose the weight that they desired. One woman stated that without the medication, there was no way that she would have been able to Bridge the Gap.

> But do you know what? Without that I don't think that I could have gotten to the second [part of the model]. (...) And that [pointing to negotiating the bridge] gave me a break from thinking about it. It gave me the taste for the first time about what it's like to have control. Not to be thinking about it. To be making choices without there being this inner struggle of, "But I want this. But I know I should have this." It [the medication] took away the "But I want this." I know I should have this. And that's what I'd have. And it's that simple. And now, having had a taste of that... After having experienced the real, real benefits from that, now I can do that and it's much more than... you know, I still want chocolate

> from time to time but it's not such a big struggle anymore. Whereas, before I would... It got to the point where I'd leap to that choice because it was just so frustrating and so, without that artificial control I couldn't have gotten to that second circle [achieving a balance].

Bridging the Gap was central to the experiential process of women taking anorexiant medication. The women desired changes to achieve a slimmer weight and more positive body image. They essentially wanted to move from a situation where they had frustrations with dieting and disappointments with previous weight loss efforts to one where they could first lose the weight and then maintain it. Taking the medications was a catalyst that allowed the women to Bridge that Gap between these two worlds.

Reaching a space

This phase begins with the women continuing to desire to lose weight for a variety of reasons (see Figure 2). The term, continuing, is used to describe the fact that each of the women who were interviewed, believed their weight was an area of concern for a long time. In fact, many of the women had been concerned about their weight since their late teenage years. Weight was such a concern for some women that they could recall their weights and/or sizes during each phase of their lives.

> By the time I was eleven and in grade 7 I was... What was I? About 210 pounds. What I did then was I wanted to weigh less while I was in high school. Get my weight down. I'm not sure how much, maybe 180 or 160. Uhm. While I was in college I worked on it. In grad school I went down at one point, I would guess to about 140. And yes, it would be nice to get back there again. But then after my first child I bloomed. With the first child I bloomed up to 190 and eventually got back again to 140. And then after the other, the next child, I didn't quite reach 140 again.

The reasons that the women cited as creating a desire to lose weight included the influences and opinions from others as well as personal reasons that may include health concerns. In addition, each of the women had some role model, either a positive or

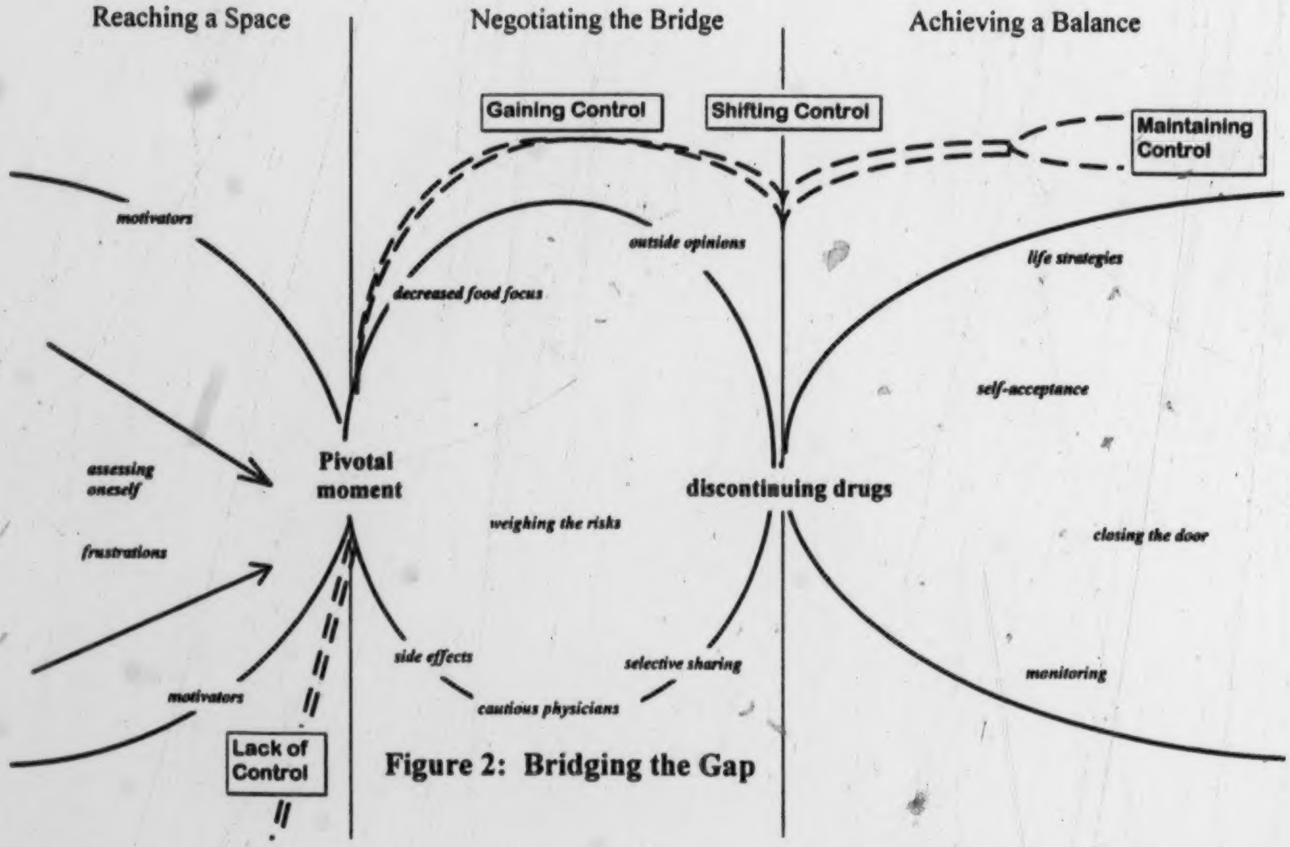

Figure 2: Bridging the Gap

negative, that shaped their desire to lose weight. The phase, reaching a space, began with an increasing desire to initiate weight loss that is fueled by frustrations about current or previous weight loss efforts. During this phase the women also appeared to undertake a type of self- assessment where they analyzed their assets and their short-comings. It is, in effect, an inventory of themselves that allowed them to recognize their unique and good characteristics, while assessing where they needed to improve. Often, this area of improvement was simply their bodies. Eventually, the individuals begin to search for options to achieve the weight loss goal they desired. This phase culminated in the individual reaching a point where each woman took steps to initiate drug therapy.

Motivators

Motivators were the components of each woman's life that influenced her to desire to lose weight. These motivators came in many forms including influences from others which caused the women to want to lose weight. Perhaps the most influential motivators came from friends and acquaintances. For some, these influences began while the informant was younger and trying to "fit in" to a particular social group or clique. In this example, the woman interviewed felt that certain groups of friends made her feel pressured to look differently than she did which harmed her self-esteem.

> And your friends even. Like the popular group. Like it was really hard. Like I've never had a problem then all of a sudden it was so important what you looked like and that was the biggest deal. So I just felt really bad about myself.

Other women interviewed expressed pressures from friends or acquaintances while in adulthood. These influences and opinions from others helped create a desire to lose weight.

> Actually, adults are mean too. Because, I've... When I was at my heaviest I.... You'd get dressed up and think you look really good and you have someone say, "Are you pregnant?" Jeez. I thought I looked good. You think I'm pregnant? I must look like a [funny face].

All of the women stated that they believed that there was a stereotype in society that suggested that if an individual was obese, then she must be lazy or lack self control.

> I think people.... Honestly, they see someone who's fat and they think, "What a lazy person. Why don't they lose weight?" That's it. I mean I came home yesterday and my sister is hugely, hugely obese. And my husband said the same thing. "Oh, what a fat pig. Why doesn't she just lose weight?" And that is prevalent. Men, I think are worse than women because they think, "Just do it."

> Everywhere. You get looked at different. Like if I'm sitting down in a mall in a food court. Those people around me might not know that I haven't eaten all day but as a heavy person, the looks you'd get if you weren't eating something that was typically healthy as opposed to being a thin person and eating that same thing. Nobody gives you even a second look.

Three of the women also volunteered the information that even they, as obese individuals, did or currently still do look at others who are fat with some curiosity, pity or disdain.

> But, uh, yeah, I think so. They [society] look at people and they don't..... they think they're slobs. And I almost..... it's funny. I'm overweight and I know it but still, somebody that is really bad, I think, "Holy smoke!" And you watch them sit down and eat and you think, [laughs] "Why?" You know? Uh, I think we all need to take a step back from where we're coming from because I know my attitude has changed since I've put on the extra weight. There's a skinny person inside me that want to be let out and I wish somebody would open the door, you know? Because what I see of myself, uh, I remember the person that wasn't that fat.

> And now that I am. like slimmer, I still. I do that and I think, "Oh, poor person." And I think that's terrible of me and I'm really not a judgmental type of person. but also for the fact, how do I know what that person is doing? You know? like it's not.... It's almost like you feel sorry for them just because you know what it's like to be like that.

In effect, they believed there were societal pressures that taunted obese individuals and accused them of being out of control, not only in their weight, but in other aspects of their personal lives as well. Some of the women believed that their weight outwardly described a false sense of being out of control to those around them.

> This woman who got her stomach stapled, she's got a very high level position with the city, she's an incredible woman. A single parent. I mean, the things this woman has accomplished..... amazing. But she just can't get it together with her weight. So I don't, I don't know what the definition of a disease is but this is certainly a huge problem in otherwise intelligent people. Just, it's such a hard time....And it's just on display for everyone to see. Look how out of control I am. You know?

> I'm a good person and I know that. If you would have asked me two years ago I may not have come up with that same comment. But I know I am. I wouldn't hurt anybody or do anything. But yet, people will look at me and.... Like I'm sure a lot of people around here think, "Oh well, [name], her husband probably just up and left her because she was overweight."

Despite the feelings that occurred from the reactions of those around them, all of the women expressed that their families were supportive of them. They believed that their loved ones were not overly judgmental about their weight and were not the main motivators in their weight loss efforts.

> My husband's totally supportive of my weight loss but there hasn't been a big change in our relationship since I lost weight because weight wasn't an issue with him. It was an issue with me so, you know. For him, if I were heavier now, it doesn't matter to him because I was married for two years..... I was 25 pounds heavier when I got married than I am now. And uh, it wasn't an issue then. It wasn't an issue at my highest point and it wasn't an issue now.

Despite the belief that their loved ones were supportive, the women experienced some pressure from their families which made them contemplate their weight and eating habits.

> My husband's never said anything about weight. But a couple of times I have sat down to eat and he said, one time.... We were all sitting here and he said, "Well, you woofed that down." or "You inhaled that fast enough." or something. Making me realize it, eh. That I've eaten all this food. And I thought, "Oh, this isn't going to work."

Another example of such an influence was from one of the women's mothers who absent-mindedly made a comment that had influenced the informant.

> ....like my mother made a remark to me the other day. It really hurt but I know damn well that she didn't say it to hurt me. She bought me an outfit for my birthday and phoned up and said, "Well, did it fit?" Yeah, well, and she said, "Well, I figured it fit because I put it on and I could put two of me in it." She didn't say it to hurt me but it really, really hurt. You know, so.... You know. And that's coming from my mom. But my mom didn't say it to...
>
> (...) but I remember when I was a teenager my mom would always say, "Oh, you'd be so cute if you lost some weight." And Charlene Tilton. She was an actress on Dallas , OK? We used to watch Dallas and my mom would go, "You'd look just like her if you lost weight." And I will never like Charlene Tilton just for that. My mom would compare me to that all the time.

One woman mentioned that comments from her parents about her weight issue were frequent and, over the years, made her resentful about their input on the issue.

> My family are the naggers about my weight and all that. And all growing up when I gained my weight in my late teenage years there were always lectures and stuff. And it wasn't helpful. It just made me resentful. So I am desperately going to try not to do that with my own kids. I hope I don't forget.

Role models, both positive and negative influenced each of the women's lives. These role models acted as motivators in the lives of many of the women. The negative role models came from both family relations and the outside world. Often their images or actions gave the women a frame of reference that showed them what type of person they did not want to become.

These influences from family may have been subtle and a simple observation of obese individuals in the informants life.

> My family's overweight and I didn't want to end up like all of them. It's a struggle.

Other influences may be more blatant and come in the form of a very obese individual in their family who they have observed. These negative role models tend to be individuals who are extremely obese.

> And uh, I have a sister-in-law. I have a little inspiration. I have a sister-in-law who weighs probably around .... probably this moment weighs around 450 pounds. She weighed about 400 when I went on it [the medication], And she.... we were all at my mother-in-law's last fall and she didn't fit into anything. Like she couldn't sit in a chair. She sat on the couch but, [laughs]... And I thought, "Oh!" And she told me that ... I think it's really an illness because she told me she gets up in the morning. She has a teenage daughter. She gets her daughter to bring her bacon and eggs in bed and she just kind of stays in bed. They go to school. And she stays in bed and uh, she'll get up around 3:00 and get dressed. She doesn't ever do the shopping. She doesn't ever go out in public. She doesn't even like to go out where relatives are because she is so worried about her weight. Actually nobody cares. I mean, everybody looks once but (...) It's family. Yeah. And she doesn't...... To me, my first thought was, "Why don't you do something? Why don't you get up and even walk?"

The majority of the women could also cite negative role models from society who they have observed and never want to become.

> People, yeah, obese people, and then I don't know if you've ever gone to a smorg. Like, uh, Buffet World and you see all these huge, huge people and you think, "Oh my God." And they are just eating large amounts of food. But those are the ones that eat in public.

Positive role models for the women were often women who had successfully achieved a weight loss and maintained it. These role models were the ideal or "success story" that many aspired to achieve. Only one woman mentioned a friend who had successfully lost weight using anorexiant medications.

> This friend of mine, [friend's name] who lost 40 pounds in about ... she says 6 months, but I think it wasn't 6 months. It was more than that. It was probably close to a good year to lose 40 pounds. And she did it really quickly but she's kept it off for a whole year now. Maybe she put back on 5 pounds. That's it. So she lost 42 and put back on 5. (...) With the Ponderal and Fastin.

The majority of positive role models for women were individuals who had what they believed to be successes at weight loss or maintenance, regardless of the method by which the individual achieved it.

> Uh, my mother on the other hand, uh, she's probably the heaviest she's ever been right now. Uh, she got into swimming when she was 42, just after my youngest brother was born and when she was pregnant with him....he was born in December. She was pregnant in November, riding her bicycle and you could hardly see she was pregnant. She was extremely health conscious.
>
> And yet, I have a sister-in-law who's maybe she's about...... How tall is [Name]? She's about 5'7" and if [name] weighs maybe 110 pounds soaking wet, that's an exaggeration. But if you see her sit at a table.... Everyone accuses her of being anorexic. But if you ever see her eat, she, like, she'll eat three helpings. It's just her metabolism. So she eats there and that's where she eats. And she does... her job is physical activity so she wears it off.

There were physical reasons cited for wanting to initiate weight loss in seven of the nine women interviewed. The women were either concerned with physical ailments that may strike them if their weight continued to rise or were currently concerned about symptoms that they may have been experiencing already.

> I want to be able to get around and everything else. If losing more weight would do it - fine.
>
> I got scared because I got those symptoms [diabetic]. That's a really big thing. Maybe if I hadn't started to have those, I would have just continued along at 235 pounds, you know, until I croaked.

Another motivator was the desire to look good and with that, the desire to fit into stylish or favorite clothing. Each of the women perceived that an obese individual did not look as attractive as a thinner individual.

> One thing I know is I don't look good.
>
> The other part is I do really like to look good. I like to have nice clothes and you know, you're limited when you're over 200 pounds. Although, I do..... Like a lot

> of people tell me that for a big woman, I have gorgeous clothes. So I do make the best of what I've got.
>
> If I go swimming now, I'm the biggest woman in the pool but I still go because I don't care. I know I have to do this. But I would like to get down so that I'm not the biggest woman at the pool. And uh, occasionally, there is someone bigger than me there but, uh, she's probably 25 years older than me. So I would like to get down so that I could be less ashamed about what I look like in a bathing suit. Uhm. I don't think I ever want to be bikini material.

Two women mentioned their desire to look good may extend beyond simply losing weight to look good but may have a positive impact on their employment situation.

> I want to look good like everybody else. And I want to look good enough to manage to get a job.
>
> I want to go back into the work force. Even part time. And uh, I know if I had gone to look for a job in October I wouldn't have found one. They would have just..... Oh, I probably would have got a job but not the kind of job. But I worked for the [company name] for years and did promo and media releases so we always dressed. I would dress up and although you work a lot of night because you work [events], uh, I would have never got the job back. Because, I know they don't discriminate but if you don't quite, if you don't have the job qualifications which are forty pounds within your normal weight. It doesn't actually say that because you can't do that but, uh, people do discriminate.

The women that were spoken to also wanted to lose weight for others, particularly for loved ones.

> I think if we're going to go ahead and have children, I need to keep my weight under control because I will have enough on my plate. Uhm, I want to be comfortable taking kids to those types of things [swimming].
>
> And I would like to be slim for my husband. Uh, he is always very proud of me because I am, in his words, "a smart lady" and I have done a lot. I have good taste....But I know that he would kind of feel good if I walked in there looking like... who would I be? Tina Turner's body would be nice [laughs].

Finally, the women were motivated to lose weight for themselves. Perhaps this sense of losing weight for themselves is a culmination of all of the pressures that the motivators previously mentioned had on each woman. Had the women not perceived that they were less attractive than their thinner counterparts, had they not felt pressure from physical factors, friends, family and society they may not have felt the need to lose weight for themselves.

> Uh, just because I wanted to see if I could drop the weight. It depresses me very much. It still does. It always has. Probably a little bit more now than previously.

The motivators were complex and often different for each woman. For example, some of the women were not influenced by role models to lose weight. For others physical consequences of obesity were a concern, while others wanted to lose weight to look attractive. Regardless of the interplay of these motivators, they caused, the women to examine their own lifestyles and bodies and this contributed to their desire to lose weight.

Assessing oneself

Within the phase, reaching a space, the women assessed themselves. That is, they performed an inventory of their assets and shortcomings. When the women recognized their assets, they cited both were physical as well as intellectual.

> And yes, I graduated with the highest in University with my marks.
> C- Wow.
> Dean's list and I got every scholarship going but I put on weight.
>
> Sometimes it depends on your body shape. Like I pretty much have a waist. Even now I have a waist. So when I have a dress on, even when I was a size 16 or 18, I wouldn't look that bad. It's my body shape. Whereas some people get that round middle, like barrels.
>
> People used to say I had a pretty face. And maybe, I had girlfriends who were far less weight that me but they seemed to put on four chins. I don't tend to do that.
>
> ....I got my job based on merit. I didn't get my job because I have a figure like Valerie Oskosky. Uh, I got my job because I am competent and everything.

The women interviewed also acknowledged their shortcomings, somewhere during the phase of reaching a space. Their shortcomings often dealt with their non-compliance during dieting attempts or while trying to maintain a healthier lifestyle.

> We've [the doctor and the informant] tried diets. We've tried you know, not just.... You know, I don't stick to them. I don't. You know, I am my own worst enemy.
>
> Like I like cheese too and I'd eat a whole bunch of it and that means I would have to get up and slice it. I've been very lazy lately. I don't want to have to do anything. I don't have the energy and the inclination to do a darned thing.
>
> I have known all my life what not to eat and all of that. So it wasn't a knowledge problem. It was a motivation and stick with it willpower problem.

The self-assessment that was revealed in the interviews appears to be a sub-conscious survey of negative and positive aspects of the women's lives that made them realize that certain behaviors were creating their weight problem. Each woman, acknowledged, at least on some level of her life, that she possessed assets beyond her weight and appearance.

Frustrations

Throughout the phase of reaching a space, the women interviewed faced many frustrations with physicians, family members and other weight control measures that were initiated. These frustrations appeared to be precursors to the decision to try anorexiant medications. As stated earlier, the choice to use medications was not an initial weight loss mechanism for the informants.

> I've talked to different doctors about it. Uhm.... Talked to different friends about it. Been referred to different doctors and tried different diets. Throughout them, one which I thought was rather wonderful was a British doctor here in Edmonton and all I ate was three pieces of fruit a day [sarcasm].

> I've also been in behavior modification with the University of Saskatoon for a whole year. I did that and I don't know what the answer is.
>
> I've been to Weight Watchers more times that I can count. I tried Jenny Craig. I tried uh, just about everything. Every kind of book and the Atkins diet and everything. There was even a cabbage soup diet. Yeah. All those things and the end result was I ended up about, close to 270 pounds and stayed there. It seemed like every time I'd get down to about 190, that would be.... I just couldn't get beyond that and then all of a sudden I'd be...[gaining weight]
>
> I was so frustrated. Like from trying. Exercising. I mean when you exercise 3 hours a day and you eat like a bird and you don't drink alcohol and you know, people..... it's frustrating.
>
> But a recipe. I wish there was a magical recipe that you could just sit down and say, "Don't do that." I mean, I know our bodies need the right nourishment to go on but I guess what I'll never be able to understand is why one person doesn't have the problem and the next one does. And I mean sure, if you sit there and you eat pounds and pounds of food, I can understand. Like there was one show there I was watching, whatever one comes on when I'm home for lunch in the afternoon. Uh, and they had this lady on there. She was 800 pounds or something. And you know, a typical snack for her was a box of cookies. Well, if I sat and ate a box of cookies, you know, or you know, how many pounds of groceries they go through in a day and I'm thinking, "My God." But...Well, yeah. That's what I find the most frustrating is the fact I don't pig out. You know? I just don't.

Frustration with other weight loss attempts forced the women to search for alternatives in their weight loss efforts. Throughout the voicing of their frustrations the women stated that they had searched for weight loss alternatives. Many of their attempts at weight loss were met with failure while others were successful initially but they were unable to maintain their weight loss.

Pivotal moment

The motivators that involved the act of assessing oneself, experiencing physical and social pressures to lose weight and experiencing frustrations and failures with other weight loss attempts culminated in a point where the women sought another solution. The pivotal moment was the term used to describe the moment where the women realized that their weight was truly out of control and another solution was needed. The pivotal moment tended to be a certain weight or size that the individual experienced that prompted them to seek out another solution.

> And right now, the heaviest I've ever been was 235. And that was kind of like the real scare figure for me. The minute I saw it going beyond that 235 I would get like, "I've got to get control of this." So that was my real big scare figure and for some reason I never went over 235.
>
> Looking at myself. Actually, I kind of had an awakening experience when I was going over to the size 22's and I went in. It was really..... I think I had the tendency to look in the mirror and almost like people who were anorexic, they look in the mirror and think they are fat. I used to look in the mirror and think I wasn't that bad. Until you go... and when you're putting on that size 22 and... the party's over.

Many of the women also believed that you have to reach a point as an individual who is willing to try for herself to lose weight. In other words, the pivotal moment is an experience unique to that individual.

> I think because it's got to be a personal choice. The whole weight loss thing is such a personal..... you have to be in a certain place. Have been through certain things. And I mean, not everybody stands in the same line.
>
> I think you, yourself...... You can only convince yourself of that. You can't convince anyone else. But I would tell people to try to exercise before..... It's a maturity level you get to. I hope that's what it is. Because I'm a lot more in tune with my body now than I was then.

The women also realized that they may not have reached that space before themselves and their dieting attempts may have failed because they weren't ready to commit to a lifestyle change or other weight control intervention.

> Yeah, now that I think back on it, I did do some aerobics. Some quick walking and I tried running but it just... I wasn't ready yet.

Reaching a space describes the culmination of all of the influences that each of the women experienced which made them desire to lose weight. As mentioned previously, the magnitude by which each of the factors impacted the women's decision to initiate weight loss may have been different but the overall impact remained the same. Motivators, assessing oneself and frustrations combined and created the momentum which led the women to their pivotal moment and the weight loss initiative.

Negotiating the Bridge

The second phase in this process of Bridging the Gap was the stage in which the women initiated taking the medications in an effort to lose weight (see Figure 2). As stated earlier, three of the nine women sought out the medications from their physicians while the remaining women were placed on the medications by their physicians.

Negotiating the bridge was a critical part in the informant's movement between reaching a balance and the final phase where they adjusted to life without medications. The negotiation of the bridge signified both the positive and negative aspects of taking the medications. The positive aspects were reflected in their weight loss and increase in self-esteem. The negatives of taking anorexiant medications occurred with the incidence of side effects and the concerns about the medication voiced by family, friends and cautious physicians. The constant weighing of the positive and negative aspects of anorexiant medications required the women to negotiate their movement to a point where they discontinued the medications.

Decreased food focus

Because the medications had a physiological effect, the women often experienced a dramatic decrease in their desire for food and, in turn, their food consumption. This event, of course, initiated their weight loss. Approximately half of the women found that the diminished desire for food decreased as time progressed, however their eating was still controlled compared to their previous experiences.

Initially the feeling of control over eating was very powerful, and in most cases it gave the women a feeling of control over their eating that they may not have experienced before.

> It gave you a real feeling of control, though, because ooh, I go and not eat at all. And it was really cool. I don't have to eat because I've got these pills. That makes me feel good. So it's scary. Really scary.
>
> Definitely in control but it was almost euphoric about how well I could deal with this stuff. I didn't want it anymore and I thought, "Whoah." I got a high off not craving that stuff. And I thought that was one of the best highs I've ever had [laughs]. I wasn't interested in chocolate bars and all that..... to me, that was a big thing because I..... Like I say, I buy a box of chocolates and eat half of them.
>
> It was amazing. It was amazing that all of a sudden I wasn't obsessed by food anymore. I wasn't hungry and I always thought I wasn't hungry but I always wanted food. I didn't have that. And uh, it was wonderful.
>
> You know what? It [food] doesn't control my life. When I'm on the medication, food is not the biggest thing I think about. Uhm, I eat healthy. I eat normal. I eat everything that I want to eat but I eat it in smaller quantities and uh, it makes my life seem so normal.

This feeling of control over food and the decrease of food focus in their lives, caused a downward trend in their weight that they desired.

> And I lost 57 pounds in 3 months.
>
> I went down 20, 18, 15...... 5 sizes. Because these jeans are 14 so..
> (...) Three months actually.
>
> But when he [doctor] was doing it at 2 pounds a week and I never lost..... I never, ever lost... I think the most I lost was 2.5 pounds a week. I never lost more than that. I think 2.5 pounds [per week] was the most I lost.

This aspect of taking the medication was a powerful motivating factor that encouraged the women to remain on the medication and continue their weight loss efforts.

The control over food intake and the almost immediate success in weight loss were difficult to negate when faced with the negative aspects of medication use.

Side effects

During the course of therapy, each of the women experienced some type of side effects from the medications. The majority of these side effects were considered minor and included symptoms such as dry mouth, nausea, diarrhea and vivid dreams. These side effects, though uncomfortable, did not cause any of the women to discontinue the medications.

> Yeah. You can't get enough to drink. But see, it seems to me, afterwards, it seemed to come down and it wasn't as bad. But I think the thing that bothered me the most when I first went on it was the dizziness. The lightheadedness. But they said it would pass and it did pass.
>
> Dry mouth and thirsty so you'd be drinking so much water. You know, just filling yourself up on water.
>
> I had very vivid dreams. I used to have almost nightmares and.....
> C- A lot of people.....
> Yeah. And always ones about, like water. In one I was like swimming and I couldn't get out of water. Things like I was... Almost nightmares and I'd wake up in a cold sweat.

Others had side effects that were more disconcerting including feeling invincible or "high", however none of the individuals who experienced these effects discontinued the medications. One woman did not make any changes to her regimen, while others made adjustments like changing to a different anorexiant medication, changing dosages or discontinuing only one of the medications.

> I was higher than a kite for about 4 months. I didn't sleep for about 4 months. I didn't sleep so I had to take Gravol to sleep. And... so the Ionamin, I was in a complete daze. My house was cleaner than you would ever believe a house could be clean. Oh, I was higher than a kite. The fact that I didn't actually get into an accident was a miracle when I was driving. I remember one day when I was just

> parked at a stop sign and drove right out in front of a lady. Oh, it was terrible. Uh, of course I didn't eat. It was a quick weight loss. No doubt. But it was..... It was scary when I look back on it now. It was a really scary phase.
>
> Like with the Ponderal, it was the worst. I remember for just about ..... I'd go in cycles about, first it was every month and then it was down to 3 weeks, 2 weeks Like I'd go and I'd be OK. But no real energy. Just "there". And then 2 weeks of real depression. I didn't even want to get out of bed because I was so physically tired...
> Question: And plus, you're dopey from the Ponderal.
> Yeah. And your mind isn't clear because it's almost..... It's fuzzy because you have no energy. Your brain's starving. Your body's starving. Your brain's starving. But you're really..... And physically, you just don't have the energy. And then you couldn't... I wasn't even reacting normally or rationally. It was a totally irrational experience.

Outside responses

Responses from friends and family were an important component of this category. Positive responses about weight loss encouraged the women to continue with their weight loss efforts and generated an increase in enthusiasm and confidence about their ability to lose weight.

> Oh, family likes it. Daddy likes it. I like it. The kids, uh, oh, the kids used to say to me.. and I don't think the kids are mean. They say, "Oh mommy, you're fat." No one says I'm fat anymore. Uh, [daughter] says, "Stay out of my closet."

Negative responses, on the other hand, were not so much about weight loss as they were about using the medications. Some family members and friends were concerned with the usage of such medications, particularly with the increasing media attention that the medications were receiving regarding the incidence of side effects.

> Question: How did you friends, family, whoever, react to your weight loss when you were on the medication?
> Good. Until they found out what the side effects were.
> Question: And they flipped out?
> That's about the size of it.

The negative responses from others led to another phenomena described in the next category, that of selective sharing.

Selective sharing

Selective sharing describes the phenomena of the women not sharing with others the fact that they were taking medications to lose weight. It can be hypothesized that the reasoning behind this selective sharing was embarrassment about using this method of weight loss and the fear of negative reactions from loved ones. Selective sharing was enacted by avoiding letting others know about using anorexiant medications.

> But then I would go from pharmacist to pharmacist so that they wouldn't track. I was embarrassed that I was using them so I would just go from one pharmacy to another to get them.

Selective sharing also was displayed by some of the women because they did not feel comfortable telling loved ones that they were taking the medications.

> My mother and my father. My boyfriend doesn't know. My ex-husband. My kids. Nobody knows.

> You know what? I've told one person that I'm on this and she... The only reason that I told her is that she has had her stomach stapled twice and had to have it redone this last time and so we've had this kind of weight loss bond and so she's the only one.

The majority of women, though, did not intentionally hide the fact they were using the medications. They did not volunteer the information unless asked about their method of weight loss. In these cases, the medications were simply a means to an end and there was no embarrassment or shame associated with taking the medications.

Cautious physicians

The majority of women expressed satisfaction with their physicians and how they were treated when they were prescribed the medications. Many of the physicians were cautious about putting their patients on the medications and ensured that the women were educated with respect to the possible side effects of the medications.

> I read about it [the medication] and then I went in and asked the doctor about it and said, "Well, can we give it a try?" Uh, he kept a really close watch on me though.
>
> I would have liked to stay on it another two months but my physician was very nervous. He was really nervous. We went in once a week and he weighed me. He took my measurements and my blood pressure. (...) and he was really nervous and he had gone to a couple of conferences while I was on. He said, "No. I am not leaving anyone on it longer than three months."

The phenomenon of cautious physicians was an important factor in how the women perceived the medications. Cautious physicians were appreciated by the women because they believed this reflected how much their physician cared for their well-being. The concern shown by physicians about the use of anorexiant medications may have impacted the patient's beliefs about the risk of taking the medications. This concern further reinforced by concerned friends and relatives and media reports about side effects encompassed the negative aspects of the drugs.

Weighing the risks

Intertwined with the successful weight loss and the increased control over eating habits was the women's act of weighing the risks of being on the medications. Weighing of the risks occurred throughout the second phase of negotiating the bridge. Frequent reports from the media about the incidence of pulmonary hypertension and the cautious physicians that existed contributed to the women rationalizing why they were on the medications in the first place.

> I wasn't getting the side effects they were talking about. But I'm thinking, the longer I'm on it, am I going to get them? Because there are some pretty wicked ones.

> So after much discussion we [doctor and woman] went.... I was about 2 months where we said, "Let's... Should we? Shouldn't we?" and he kept sending me home and saying, "Make sure this is what you want to do because you are risking..." But I have a bit of a problem with the study that they did because obese people are subject to that being a risk factor anyway. So you know, I don't know. It's not that I don't think that it could possibly happen to me but I'm really hoping it doesn't.
>
> ....I mean I started off at a real heavy weight and it was starting to affect my health in other areas. So you weigh the risks and what are the risks of being 10 pounds overweight? (..) As opposed to the risks of the medication. And there are risks. I don't know. If it was my daughter who was 10 pounds overweight, I would freak out - if she was wanting to do a medication like that. You know, you have to weigh the risks and there are no risks necessarily if you are 10 pounds overweight.

Some of the women also suggested that positive mental attitude may protect them from the side effects of the medications.

> .....I got a sheet. I think I still have the sheet actually. The information on side effects. My whole theory was I don't need this sheet because this is going to work and I'm not going to have any of these side effects and ... forget it.
>
> I wanted to lose weight. It [side effects] was irrelevant. If they said, "you know, out of 100 000 people using this drug, 10 might have a problem with it." I would go, "It wouldn't be me."

One woman recognized that this positive mental attitude may be a type of denial.

> When I was a teenager and I was a young mom at 17 and I was one of the ones who said it wouldn't happen to me. It's the same thing with weight loss. If someone tells me you could die taking diet pills, it's a denial thing. I won't take it because I would far rather be small that look at the consequences. It's a denial thing.

Discontinuing the drugs

Of six women who had discontinued the medications, three women discontinued the drugs on their own volition, physicians discontinued the medications for two of the women and one woman's physician was unable to prescribe the medications any longer due to prescribing restrictions from the College. The three women that remained on the medications did so at their physicians discretion, while the final woman was scheduled to discontinue the medications during the study but convinced her physician to continue with treatment. In this latter case, the physician elected to change her to another anorexiant medication.

Those who discontinued the medications of their own volition did so because of some concerns with side effects or concerns from friends and family. Those who had the medications discontinued by the doctor viewed their weight loss efforts without the medication with some skepticism and, in some cases, dreaded life without them.

> Question: When the doctor told you you have to discontinue it [the medication], what did you say?
> I can't repeat that [laughs]. I said, "Can I get another 2 months please? Please." "Nope."
>
> Question: Do you think when you get off the medication it will change, like that your weight will go back up?
> Yeah. I feel that because I tried to go off it before. And I feel that it scares me. And I'm almost, in my mind..... Like I'm supposed to go in in a couple of weeks. I feel like I should phone him or like when I go there, tell him, "No. I can't go off." Like that's what I did the last time basically, is begged him to stay on it. But it's not a physical dependence. It's mental. It's psychological.

The apprehension occurred because the women felt insecure about their abilities to maintain healthy eating and exercise habits that some of them had cultivated while on the drug therapy.

In summary, negotiating the bridge describes the women's experiences as they start the medications, experience a decrease in food focus and become successful at weight loss. It also describes the negative aspects of the medications such as experiencing side effects. The interplay of the positive and negative components of taking the medications caused the women to weigh the risks of being on the medications. Negotiating the bridge concludes with the discontinuation of the medications.

Achieving a balance

Achieving a balance was the final phase of the process, Bridging the Gap (see Figure 2). This phase was characterized by various adjustments each woman made in her life that would maintain the weight loss achieved during drug therapy. The feeling that ran throughout this phase was the need to implement certain strategies to ensure either weight loss or future weight maintenance. These strategies included buying smarter, exercising and allowing indulgences. They also contemplated future options for weight loss if they were unsuccessful in maintaining their desired weight. This phase was also characterized by certain activities that closed the door to the life of an obese individual in their minds. It also was a time where it became evident that the women had achieved a sense of satisfaction with themselves and had tempered their views about the lifestyle changes that they were required to make.

Life Strategies

There were many strategies that the women put in place to prepare for life without the medications. These strategies were skills that they learned while they were on the medications or they had learned previously but had never successfully implemented into their lives. Many of the women had read instructional books and cookbooks, taken classes on healthy eating or had been involved in organized weight loss initiatives that provided instruction. The majority of the women who had discontinued the medications intended to implement what they had learned over the years of dieting and during their drug therapy.

Buying smarter was a strategy intended to maintain weight loss. This term describes how the women who implemented healthier eating choices sought to keep healthy foods in their homes.

> I've been buying low or lower fat. I have to check. I can't remember if they're low or lower fat. What are these? Oh, they're low fat baked crackers. The kids are eating them like chips because they have the chip mentality almost to them. It's like a potato chip and they've been eating those.
>
> I went with [name], my husband, and bought this lovely Dempster's bread. it was nice and solid... supposed to be whole wheat. And you look at the color of it and it's got tons of molasses in it because it tastes so sweet. And it has 125 calories a slice. So I have to find something else that's a bit better than that.

Connected to buying smarter were a variety of sensible eating strategies that the women adopted to maintain their weight.

> I mean, I buy no fat yogurt. I don't use margarine. I buy no fat mayonnaise. I use brown bread instead of white bread. uh, I try to eat a lot of fruit. A lot of apples. A lot of fruit, vegetables, you know, and it seems.... I don't know. For me it should be easy because I don't bring chips into the house. the only time I have any of that stuff here is if [name]'s here or any of the kids are coming over. That's it. So I mean, if there's only good things to eat, what can you do?
>
> And actually, I've made it my mission now. I'm like a born again fat free person 'cause I'm trying to adapt all my recipes and stuff to low fat and trying to do this for my friends and like, "PK. You can't do this. You have to do this." So I'm very annoying [laughs].

Each of the women who discontinued the medications and wanted to maintain healthy eating habits but were realistic. Certain indulgences were recognized as being an essential part of maintaining a healthy and balanced lifestyle.

> I still like to eat the odd chocolate bar. I still like to have MacDonald's once in a while. But it's really changed.
>
> And now I have probably gained nothing since I went off it [the medication]. I don't think I've lost anything, but I've gained nothing. I eat everything in moderation. Even go to MacDonald's.

> And I think you have to change your perspective on things. It's a lifestyle. It's not a .... And so I shouldn't go and blow it all by, "Now I'm thinner. I can go and eat MacDonald's every day." Because I can't. But that doesn't mean I can't ever!

Exercise was another important strategy that the women employed to maintain their weight. Exercise initiatives ranged from choosing to walk further than previously to undertaking a strenuous work out regimen that included running and weight lifting. Initiation of an exercise regimen did not always occur while the individual was on the medication. In two instances, the women did not exercise while on the medication. One woman initiated an exercise regimen, but it was short-lived. Six of the nine women did exercise while on the medications and one of these participated in an aquasize class that was required by her physician in order to remain on the medication.

> Uhm, and you know, it's getting to work. Parking the car and you're going across, so I am actually doing a little more, although low on your activity scale. I would still be called sedentary.
>
> I think I've found it [a magic cure]. It's exercise. uh, I know that. I've known that all along. But I wanted to be the person who never has to exercise because I don't particularly like it. But I know that now. But, you know, I wanted to avoid that at all costs. I hated sweating. I wanted to avoid. But at thirty I decided to take control of this now.
>
> When I started exercising in September is when I joined Club Fit. I wall-papered, or I stripped the wall-paper out of my bathroom. I painted it. I redecorated it. I sewed. Uh, because there was two things. The adrenalin you get takes you through the day because you feel good about yourself doing something. That you're in control. It's like two-fold. Uh, and now I know it's just exercise at least 4 times a week. I like to get out five. And it's not like, twenty-five minutes. Twenty-five minutes of running is what I do.

Monitoring

Monitoring was another mental activity that the majority of the women performed and this activity was a mechanism to maintain strict control of their weight once the medications were discontinued. Monitoring, for most women, involved watching the scales to ensure that weight gain did not occur.

> Right now I've lost about 50 pounds since where I was. And I kept some of it off. Now, obviously I've got to watch and be careful.
>
> I don't have a scale because it broke. I remember when we were moving out the scale broke. Oh dear. But you can kind of.... I can kind of tell if you're gaining five or ten pounds because all of a sudden our pants are tight. Uh, you know, you fell your bra's a little tight. So I can control it that way by knowing. I mean, those jeans will only stretch so far.

Monitoring appears to have occurred because the women have experienced the negative physical and emotional consequences of being obese and therefore, do not want to experience them again.

> I've seen that [weight gain] happen time and time again and I've just experienced the physical pain, the emotional pain of being so overweight that, that, without that experience, I wouldn't be so on top of things now.

The constant monitoring also encouraged women to be more responsive to how their bodies were feeling. It appeared that the women felt more "in touch" with their bodies than they felt previous to taking the medications. The women who expressed this view also seemed to know what their triggers for over-eating were and now could make attempts to control themselves.

> Uh, but I am in tune with my body. How my body feels. I didn't used to feel the effects of bloating. Of weight gain. whereas now, I can feel it even before I get on the scale. I know.
>
> Where if, you know, something bad happens, all of a sudden I'm hungry. or I'm more..... "No. You're not." You know, you really somewhere..... I just go with I'm hungry and eat. If I'm not..... That's why some days I'll eat breakfasts and some days I won't. Because some mornings I'm just not really hungry. Some days I'm just famished. So I listen more to my body now.

An important feature of the phase of monitoring is that the "pivotal moment" for each woman who lost weight on the medication significantly lowered. In other words, each woman's tolerance for weight gain was less as compared to when they were more obese.

> I think I'm at the point right now, if I gained five pounds I would recognize that as being a signal that I've really got to watch again and maybe pick up the exercise a bit. Do something. Whereas before if I gained five pounds it was not any big deal. But I know the five pounds can lead to ten, fifteen, twenty and that happens seemingly overnight and it doesn't but, all of a sudden, it's just out of control.

> (...) you know from experience by that point if you let that first little bit by you that eventually you are going to be back to where you were. So I think, yes, once, if you lose that weight, then all of a sudden you go, "Oh!" Like now if I put on two or three pounds again, I'm looking because I don't want to put on that weight that I have lost. Uh, because it takes far too long to lose it again if I let it escalate again.

> (...) my tolerance isn't as high. My weight's lower but my tolerance isn't that high. Ten pounds is OK. If I gain twenty, that's it. Where before, it was "Oh, I'm only 150, well, I'm only 160, 197. I'm only 220." When I'm only 200 it's time to.... it's almost like a big obstacle but my tolerance is really low. yeah. Your tolerance changes.

Self-acceptance

Self acceptance was the state where the women came full circle from the initial point of dissatisfaction with their bodies and desiring to alter them through weight loss to the point where were satisfied with what they had accomplished in their weight loss efforts. This part of the phase, achieving a balance, signaled the beginning of satisfaction with their bodies and their weight loss efforts.

> Well, you know, I still have big legs and stuff but it's OK now. It's acceptable to me the way it is now.

> And so I think, you have to sort of start accepting yourself for who you are. No matter what.
>
> But I feel so much better. I don't feel like I am lugging myself around and stuff. I like... I'm still a fairly big person but I like being the size that I am. Uh, and before I didn't. I felt really, really, really fat.

Closing the door

Closing the door was the final phase of achieving a balance and occurred when the woman resolved not to become the obese individual that she once was. This part included physical actions of the women giving away clothes. It also included the mental resolve to never gain the weight they lost or at least not to the point that they had previously.

> I don't want to go back there. I don't plan to keep the fat clothes in case I need them again. I'm getting rid of all that stuff soon.
>
> I'm going to start giving stuff [clothes] away. I have already, actually because I don't ever want to be that person again. If I don't have six wardrobe sizes to get back into I won't have the tendency to gain weight. If you don't have the clothes to fit you in your closet you tend to...you're more aware of it.
>
> Because in other weight loss programs I've been in I've always kept that security. if I gain or if I just feel a little constricted one day I'll go back to the leggings or I'll go back to that. This time I'm not giving myself permission because I think that was giving myself permission. I've kept a couple of blazers that were really nice blazers and for some reason I just can't get rid of them but other than that I have gotten rid of right from bras and panties down to...... Yes. Because it was a clean sweep for me. A total clean sweep.

Though the women had resolved never to gain back the weight they had lost, six of the nine women interviewed wanted to have the opportunity to use the drugs again if a relapse occurred.

> Hopefully I will be able to pull it all together for myself. But if I can't, I would like to know that it's not hopeless and I'm not going to be left, washed out to a

> sea of obesity again. You know? On my own. I'm hoping that there will always be some help if I need it.

The wave of control

The issue of control ran throughout the model. Often, this control was specific to the area of the women's eating habits and weight. Many of the women perceived themselves as out of control previous to the initiation of the medications.

> ..... I was just out of control. Like I'd eat large amounts of food and you know, I was one of those who was you're hungry so you eat this large amount of food, like 2 or 3 Big Mac's and stuff and you leave there. You come home. Five minute drive. And you're eating apples and cheese and oranges and.... I couldn't get enough. I said to the doctor, "I can't get enough." He looked at me and said, "You can't get enough?" "I've got this feeling that I can't get enough." That was kind of scary. Will I eat my children? Where will I stop? What happens if I run out of food? Will my children be eaten? Well, you wonder.

Once the medication was initiated, the women perceived an increase in control, or they perceived that they were gaining control over their eating habits.

> The drug increased my metabolism. I could feel it daily. I was so hyper. And it helped me to get willpower to lose. And it was a controlling device. It gave me control over food that I didn't have before.

This description of increasing control over food was also evident in the category entitled "decrease food focus" where the women consistently exerted that the medication physiologically decreased their focus on food. Often their successes made them feel more resolved to continue with the weight loss process.

> ... and because you feel better about yourself you don't, uh, want to go to the fridge and take that extra piece of cheese or you know.... I'm doing so good, so don't screw it up.

The majority of the women in the present study believed that the medication was responsible for their weight loss. They believed that taking the medication decreased their appetite and helped them control their eating habits. Two of the women contended that the medication may have worked even if it were a placebo, as long as they perceived that what the physician was giving her would help her lose weight. Each woman acknowledged that the medications were not a miracle drugs and they would not be able to produce weight loss unless some lifestyle changes were implemented.

> It wasn't a miracle drug. People who think it's a miracle drug are going to be disappointed.

Once the medications had been discontinued or the women felt that the discontinuation of the medications was imminent, there was a sense of shifting control. The shift in control over the weight loss initiative from the medications to themselves was a critical aspect of moving to the phase of achieving a balance. The shift in control to themselves was assisted by the implementation of life strategies that would help them maintain their weight and remain in the final phase, achieving a balance.

> I have control now because I'm educated about my food choices and I'm also educated about my exercising choices. So, uh, the control that I have now, I think I have replaced the pills with a higher level of education on my food choices and things. But it's still a control. There's control there. I think everybody who has a weight problem has got to feel in control. And when you're out of control you start to gain weight but when you're in control, that's when you are able to maintain.

The discontinuation of the medications was often viewed with some trepidation by the women as they feared whether they would remain successful once the medications were discontinued. Six of the nine women explicitly said that they wanted to continue or try the medication again while two considered the medications to still be an option but not one that they would try immediately.

Once control has been shifted from the medications to the individual, the control over eating habits and weight must be maintained. Many of the women noticed the return of their appetite once the medication was discontinued but were still trying to maintain the control they had achieved.

> Toward the end of the six months, I uhm, I started..... I started feeling hungry every now and then. I started wanting to over-eat from time to time, but not regularly.
>
> Like for a while, it was pretty balanced in my life and now it's starting not to be. But at the same time, at least I can recognize it. Because I'm not going to let it get to you. that, OK. If you really can't do this [maintain weight], don't kill yourself over it because it's not worth it.

The issue of control throughout the process was often reflected in, not only the women's weight, but other aspects of their lives. Once they had gained control and had begun to lose weight, there were other positives that impacted their lives.

> All of a sudden everyone was getting their eyelashes dyed. Their eyebrows dyed. their hair done and everyone's getting perms and we looked like strags before.
>
> I was in a play. I was the lead in a play. It was a musical thing... Yeah and this is not me. This is not. I never would have done this five years ago. So, yeah, like one thing has kind of built my confidence and I can just feel so much more in control of things.
>
> But when I feel like I am in control of my eating, I feel like I am in control of a lot more things that happen in my life. I become more assertive and there's also a pre-occupation that comes with being overweight that kind of overwhelms the rest of your being. Which, for me, if I'm 20 pounds overweight, most of my day is focused on what am I going to eat? How am I going to exercise? What am I going to feed my family? How am I going to get through this day? The rest of... That's what's controlling me. So it's a big circle. It's a very vicious circle.

Throughout Bridging the Gap, it was evident that the women's control over eating was constantly being negotiated through their use of the medications and their shifting of control to themselves in achieving a balance. One can surmise that this process will continue as the women struggle to maintain control of their successful weight loss.

In summary, control played an important role throughout the process of Bridging the Gap. It moved from the women's perception of their lack of control over their weight and eating habits to the control they began to feel over those aspects of their lives once the medications were initiated. Often this control over eating habits was experienced for the first time because pharmacological action of the medications decreased the women's physiological hunger. Because they did not have to worry about consciously controlling their eating habits to the same extent that they would have with other weight loss initiatives, the women reveled in the success of their weight loss. These successes reinforced their determination to continue with the weight loss effort and remain in control of their eating habits. At the conclusion of the process the women began to shift the control they felt over their eating habits from the medications to the life strategies they had implemented to maintain weight loss. Once the medications were discontinued, some of the women lost a portion of the control they gained while on the medications. However, they felt that by implementing life strategies, accepting themselves and monitoring their successes and failures they would overcome the hurdle of maintaining their goal weights in the future.

A Negative Case

During the second interview, the emerging model was described to the women to receive comments about the accuracy of it when applied to their own lives. All but one woman agreed with the format of the model. Some of the women stated that they may not have experienced certain categories but the overall experience was well-described.

Examples of these deviations from the model include, for example, not experiencing side effects or implementing life strategies as soon as the medications were initiated.

One woman agreed with some general themes of the model, such as decreased food focus, motivators and side effects but she disagreed with the way the model was presented. This informant had a different experience with weight loss than the other women who were interviewed. She experienced some of the categories in reaching a space. For example she experienced motivators such as, physical reasons to lose weight to prevent the aggravation of her osteoarthritis. She also cited societal pressures to lose weight. In her case, she mentioned the fact that there appeared to be discrimination against obese individuals in the workforce.

> I certainly would like to get down to uh, a reasonable level. I can't tell why it's hard to get jobs at this time. Whether it's the image of someone who is overweight or the image of someone who is as old as I am or whatever.

It did not appear that she reached the pivotal moment. She was placed on the medications by her physician as a preventive measure for the physical consequences of obesity. At the time of the initiation of the medication and during the interviews, she expressed that she experienced a decrease in food focus and some weight loss. However, she explicitly stated that though she would like to lose weight, she did not want the medications or other weight loss efforts to put her in a "humor where I can't do the things I want to do and do well." It seems, that though weight loss was desired, it may not have played such an important role in her life as it may have in the other informants' lives. The informant was an older, confident individual who appeared to be at relative ease with her body image. She believed that weight loss would be a positive outcome, however it did not appear that she ranked weight loss as a high priority in life as other informants did.

This informant's weight loss successes and her movement to the final phase, achieving a balance, seemed to differ from the other women. At the conclusion of the study, she was still taking anorexiant medications and had not yet had to shift the control to herself in the way of implementing life strategies to continue losing or maintain weight. From this standpoint, it is difficult to predict whether she would be able to achieve a balance at the time when the medications would be discontinued. However, from the interviews it is evident that she had had some difficulty in successfully implementing life strategies while on the medications.

Conclusion

The process, Bridging the Gap, described women's experiences with anorexiant medications. Bridging the Gap illustrates the physical experiences in the women's lives and how pharmacologic weight loss agents impacted the lives of individuals in terms of their confidence, self-esteem and determination to continue weight loss efforts on their own.

The three phases of the process describe different aspects of the women's experiences. First, achieving a balance, sets that stage for why the women ask to or agree with being placed on anorexiant medications. Once the medication is initiated, the women begin to experience a decrease in food focus, decrease in weight and positive reactions from others. Unfortunately, they also experience negative aspects such as side effects and concerns from others that manifest themselves in selective sharing. This dissonance between positive and negative creates the phenomena of the women weighing the risks throughout the phase of negotiating the bridge. The entire process culminates in the final phase, achieving a balance, where the women gain self-acceptance and implement life strategies to maintain their weight.

CHAPTER 5

DISCUSSION

The analysis of the interviews with the women who took anorexiant medications identified a process that women experience from the time they choose to be on the medications until the time that they adjusted to life after the discontinuation. The first stage of the process, reaching a space, illustrated the motivators, frustrations and personal inventory that the women experienced which had driven them to desire to lose weight. The second stage, negotiating the bridge, illustrated both the uplifting and successful components of the women's experiences on the medications as well as the negative aspects of medication use. The third and final stage, achieving a balance, described the women's experiences as they tried to make adjustments to life without the medications.

This chapter will discuss pertinent issues that have arisen during the development of the model, including the uniqueness of the core category and the aspect of control that is evident throughout the model. The process, Bridging the Gap, will also be compared to a grounded theory model about dieters' experiences losing weight. Finally, Bridging the Gap will be discussed in terms of relevant theoretical perspectives and study implications and limitations will be mentioned.

Bridging the Gap - particular findings

Bridging the gap

Bridging the Gap is a unique theory in that it incorporates the physiological experience of taking medications that both increase metabolism and decrease appetite into the social experiences of women trying to lose weight. The phase, negotiating the bridge, is initiated at the time that the individual has started the medications and is characterized by physical changes such as weight loss and side effects. There are also emotional experiences such as weighing the risks and accepting compliments and criticisms from others in this phase. Often, this phase includes the women starting to implement or thinking about implementing life strategies to maintain the weight loss.

The main question that arose during the development of the model was whether the second phase, negotiating the bridge, could be removed and replaced with other weight loss initiatives such as organized programs or non-drug products such as Slim Fast. Using the data gathered from the interviews, it would appear that the model would then collapse, leaving the first and third phases intact. In practical terms, this means that the women would experience the pivotal moment where they make the decision to initiate a weight loss strategy and move directly into the process initiating life strategies and monitoring progress. The categories of self-acceptance and closing the door may not appear, in that case, until the weight loss initiative had progressed substantially and some success had been experienced.

What makes this particular process unique is that the medications afforded the women some lenience in that they did not have to think about food as they had thought of it previously. In all cases, the women cited that the medications decreased food cravings in the initial phases of treatment. The majority of the women agreed that their eating habits remained changed during the entire therapy, even if they found that their appetites returned somewhat. Taking the medication was described as a "jump-start" that assisted the women in continuing their weight loss initiatives.

The fact that the medications facilitated the initial weight loss was valuable because it appeared to give the women more confidence in themselves and a positive cycle of weight loss occurred. This means that as their weight loss initiative became successful through the use of medications, they became more confident in their dieting initiative. Interestingly, for some of the women, this confidence extended to other aspects of their lives.

Negotiating the bridge was instrumental to initiation and perseverance of this weight loss initiative for the women. Though all of the women had reasonable expectations of the medications, meaning they knew the medications would not work in the long term without lifestyle changes being implemented, all of women credited the medications with their weight loss during this initiative. This finding was reinforced because six of the nine women interviewed wanted the opportunity to use the drugs again or would like to have some sort of drug available to prevent a relapse.

If another weight loss initiative was tried, such as caloric restriction without benefit of the medications, the women would not experience negotiating the bridge. An initiative devoid of the medications would not have the physiological effects of decreased appetite and increased metabolism. This means that the women would not experience the distraction from food and quick weight loss success in the same way as they would if they used medication. Therefore the realm of experiences that occur within the second phase would not occur with other non-medication weight loss initiatives, making this model unique to the experience of using anorexiant medication. However, individuals would likely experience reaching a space and some aspects of achieving a balance with other initiatives. One woman interviewed illustrated this point as she had been on anorexiant medications previously and had gained the weight back. At that time, she experienced the motivators, the self-assessment and the frustrations of trying diets and failing. Finally, on a trip one summer she reached her pivotal moment. At this point her choice of diet method was to enroll herself in an Optifast program for several months. This program involved consuming a liquid diet for the duration of treatment. The method did cause weight loss and she has since moved into a phase similar to that of achieving a balance, however she did not experience negotiating the bridge. The liquid diet still involved will power and control over eating in the same manner as an organized weight loss program involving lifestyle changes would. There was no physiological jump-start that allowed her to revel in the fact that she was losing weight without having to think about food. In fact, she stated that she was thinking about food the majority of the time.

Control

Control is an integral component of the process, Bridging the Gap. Within the model, the women moved from a feeling where they lacked control over eating to one where the medications provided control. Once the women experienced control over eating that some had never experienced before, they began to experience weight loss. When the medications were discontinued, the control that the medication provided was shifted to the life strategies and monitoring that occurred within the next phase, achieving a balance. From that point on, the strategies used within the latter phase ensured that the women maintained control over their weight.

The term, locus of control, refers to the belief about the extent of control one has over her life. For example, an individual who possesses an internal locus of control would believe that a positive outcome would be due to his or her own self-control. An individual who has an external locus of control would believe that outcomes are a result of luck, chance or fate or that they are under the control of others (Nir & Neumann, 1995). It seems that the majority of the women interviewed had an external locus of control as they believed the medication was responsible for their weight loss to some extent. The fact that the informants seemed to increasingly rely on themselves to maintain their weight when the medication was discontinued seems to indicate that their locus of control shifted from external to internal. When the medication was discontinued they implemented life strategies and stated that their continued weight loss success relied on their own efforts. Perhaps, in negotiating the bridge, as the women begin to lose weight they feel more confident and more in control of their eating habits and lifestyles so they begin to accept more responsibility for their actions during achieving a balance.

The women interviewed for this study may have had a low sense of coherence with regard to their dieting attempt. Sense of coherence refers to the individual believing that life is comprehensible, manageable and meaningful (Antonovsky, 1996). They may have been impacted in the construct of manageability. For example, they may have felt that they could not successfully initiate life strategies and maintain them to lose weight because of the numerous frustrations they had experienced about dieting failures. Once they had started the medications they gained confidence in their weight loss initiative and began to believe that it was a manageable task. In achieving a balance, the women successfully implemented life strategies to maintain their weight. Those who were at the final stage in the process did believe that they had the ability to maintain these strategies and maintain their weight loss.

Linked to this assertion is the assumption that control actions and beliefs can create a self-perpetuating cycle (Skinner, 1995). For example, the women experienced frustrations over failures of previous dieting attempts in the phase, reaching a space.

These frustration combined with other categories in reaching a space, contributed to the women's belief that they lacked control over their success in weight loss initiatives. Thus, the women were experiencing a negative cycle that constantly perpetuated itself with their many dieting failures. Once the medications were initiated and the women began to experience a decrease in food focus and weight loss, the positive cycle of weight loss occurred. This cycle was self-perpetuating in the same manner as described by Skinner (1995). As the women began to experience success at weight loss they felt more confident in their weight loss initiative. Women began to exercise and buy smarter thereby effectively ensuring weight loss success if the life strategies were maintained over the long term. Had the women never experienced the first success in their weight loss initiative from the anorexiant medications, they may have never been able to begin this positive cycle and increase their perceived control in weight loss initiatives.

In a similar manner, Johnson (1990) cited that control was a process rather than an outcome. Her study suggests that for dieters, control is an ongoing process that is negotiated when they begin to develop eating skills and competence in dealing with their environments. The process of acquiring control that the women experienced is evident in bridging the gap. The women metamorphosed from a state of being out of control in reaching a space to the final state of maintaining control in achieving a balance. This process was facilitated by the use of the medications and the experience, negotiating the bridge.

In summary, control plays an important role in the process of weight loss. In the case of weight loss using anorexiant medications, women are able to gain control over their eating habits early in their dieting attempt, which assists them in successfully losing weight. This success appears to aid the women in maintaining control of the dieting attempt and, in turn their weight loss. The process of achieving control in the weight loss initiative is not linear and has many successes and failures throughout the process. However, it is clear that the use of medications assists women in increasing their perceived control over weight loss and maintenance.

Weight control as a never ending story

Within the final stage of the process, Bridging the Gap, the women described a process of closing the door on their obesity. This stage involved the women getting rid of their clothing that was now too large for them and having the mental resolve to never become obese again. Despite this resolve, statistics show that the majority of these women will regain at least some of the weight they have lost (Curfman, 1997; Weintraub, 1992). All of the women recognize that regaining weight is a possibility and believe that weight control will be a continual concern for the rest of their lives.

> For the rest of my life. I think most women struggle with weight.... So you know, I have come to terms with it and it's like handling being an alcoholic. Like handling diabetes or anything else and I live with it and I know what I need. I give myself permission once and a while to eat. It's a management thing.

The question arises then, will the women remain in the final phase, achieving a balance, for the rest of their lives? The outcome is difficult to predict. If the women are successful in maintaining their weight loss, then they likely will continually monitor their successes and failures while implementing life strategies to maintain the loss. Or perhaps the reverse can be said. Weintraub's study of the anorexiant combination Fen-phen showed that patients who maintained life strategies conducive to weight maintenance did not re-gain a substantial amount of weight after the medications were discontinued

(Weintraub, 1992). If the women interviewed in Bridging the Gap manage to remain within the final phase and comply with their life strategies it is likely that they will not regain the weight.

Again, it would not be surprising if this weight loss attempt may not be the women's last. Likely, most of these women will gain some, if not all, of the weight back that they have lost during this initiative and may try another alternative. If a prescription medication is chosen again, the women will likely experience the same process of bridging the gap and withdrawing from the medications and trying to achieve a balance once again.

Other qualitative studies

As discussed in Chapter 2, one study used grounded theory to describe the experiences of individuals who attempted weight loss initiatives. This theory, restructuring, possessed three stages that included: gaining a sense of control, changing perspective and integrating a new identity and/or way of life. This particular theory describes the process that dieters at an organized weight loss program underwent as they strove to lose weight. The dieters in Johnson's study did not take medications to assist in their weight loss efforts. For this reason, the model does not completely describe the process that the women experienced as they decided to start the weight loss program (Johnson, 1990).

When comparing the two models, it is important to note that the first stage, gaining a sense of control, is an integral part of the initiation of the weight loss initiative, as well as the core category of restructuring. The individual is forced to gain a sense of control over her environment before any success in weight loss is experienced. This finding is different from an initiative that involves medications, as the women taking anorexiants were able to experience a sense of control over their eating habits without having to immediately reorganize their environment and themselves to achieve any initial success (Johnson, 1990).

Within this first stage, the second phase was coming to terms with self which involved the dieters accepting responsibility to make major changes in lifestyle. This occurred earlier in this initiative than it did in the case of the women who used anorexiant medications (Johnson, 1990). The majority of the women interviewed in this study did not have to accept this responsibility early in the weight loss effort. The act of taking the medication allowed the women to have more control over their eating. Often, many of the women, realizing that they would not be able to remain on the medications indefinitely, began to come to terms with self, toward the end of bridging the gap and/or within achieving a balance.

Restructuring possessed a second stage described as changing perspective that involved meeting one's needs, relabelling the meaning of success and failure, uncovering origins of eating style and recognizing overweight as a chronic disease (Johnson, 1990). Within bridging the gap the above processes were evident, however they did not emerge as categories. Relabelling the meaning of success and failure and recognizing obesity as a chronic disease were categories that were most similar to those experienced by the women taking anorexiant medications. Each of the women interviewed recognized that weight control was a never-ending story and some likened themselves to alcoholics. When asked whether obesity should be considered a medical condition, the majority of the women agreed that it should be for several reasons. The first of these was the fact that obesity is responsible for a variety of severe health consequences. The second of these is that the women believed there would be more recognition and understanding for their condition. Finally, one woman believed that the medications used to treat it would be covered by her insurance plan.

Relabelling the meaning of success and failure as it occurred in the process restructuring involved the women changing their responses to themselves when they would overeat. For example, one overeating episode was not considered a failure any longer (Johnson, 1990). A similar phenomenon occurred with the women interviewed in this study during stage three, achieving a balance. When women began accepting themselves, this entailed not only accepting their bodies, but accepting that they did not have to restrict themselves all the time. In other words, they believed that they were able to eat fast foods and other high fat foods as long as they acknowledged that they couldn't make that sort of eating a habit.

Uncovering the origins of eating style that was evident in restructuring did not emerge as a core category in Bridging the Gap. From the interviews obtained, it was evident that the majority of women were aware of their eating styles previous to the initiation of the medications. The women most commonly cited emotional stress as a motivation to eat. This stress was caused by occupational pressures, deaths or illnesses in families and general everyday pressures. Enjoyment of food and childhood influences were also cited as factors that influenced them to eat.

The phase in the changing perspectives stage of restructuring that is most different is meeting one's own needs. This phase involved the informants recognizing that their needs were important and that often they had to restructure their relationships with others (Johnson, 1990). In the past, some of the informants were overly nice and accommodating in order to secure friends as they believed their obesity was a handicap to their relationships.

One informant mentioned that her friends had changed since her weight loss. She believed that reasons for this included jealousy about the weight she had lost and a change in social activities. For example, this particular informant's extra-curricular activities included exercise such as aquasize and her trips to restaurants entailed small snacks rather than the feasts she indulged in previously. Her new habits were now not compatible with her other friends who had not embarked on a weight loss initiative.

The final stage of restructuring was integrating a new identity and/or way of life. This stage included testing, identification and support (Johnson, 1990). The phenomenon of testing was when the dieter found the limit of his or her food intake. This phase is similar to what the women in bridging the gap experienced in the stage achieving a balance.

Identification of themselves as a thin person was not evident with each of the informants in Bridging the Gap. One woman had essentially reached her goal weight and some recognition of her accomplishment was beginning to occur, however the other women still desired to lose additional weight. In addition, the duration of this study may not have allowed enough time for each woman interviewed to fully experience this phase.

Finally, support from family and friends that allowed each of the women to achieve and/or maintain weight loss was important in restructuring. This support involved participating in changes in lifestyle and not sabotaging the dieter's efforts. Sabotaging included sending cookies to the house knowing that the informant was dieting and nagging reminders of what the dieter should and should not eat (Johnson, 1990). In Bridging the

Gap the informants stated that their family members were, as a rule, very supportive and encouraging of their dieting efforts. Some family members did remind the dieters about eating habits or, at times, made comments that offended the women without being aware of doing so. Fortunately, most women expressed that they felt support from the majority of individuals in their environment.

Not surprisingly, control was a major theme throughout both models. Johnson (1990) cites that the process of restructuring describes control as the process that is on-going as the dieter develops skill in dealing with the weight loss effort. The process, Bridging the Gap, describes control in a similar manner. The women experienced a lack of control in reaching a space, then as they begin the medications they were able to gain control over their eating habits, mainly through the medications' physiological actions. Once the women decided to discontinue the medications they began to shift the control the medications provided to themselves. This means that rather than relying on the medications to control their eating habits, they begin to assume this responsibility for themselves. This process involved ensuring that they had developed lifestyle strategies compatible with maintaining or continuing their weight loss. Within the final stage, achieving a balance, the women strove to maintain the control they had experienced in the second phase by ensuring that their life strategies were in place and that they were monitoring their progress. Signals that reinforced the maintenance of control included accepting oneself and closing the door. Just as in restructuring, Bridging the Gap illustrated control as a process, not an outcome.

In summary, the models, restructuring and Bridging the Gap had many components that were similar. This was expected as the weight loss process, regardless of the method chosen, involves similar strategies to be successful. These strategies include changing eating and exercise habits and changing attitudes about food. The main difference between the two theories was that the women interviewed for Bridging the Gap were able to gain control of eating and experience some amount of successful weight loss before they had to endure the challenge of restructuring their environment and their habits in order to lose weight. The women in Bridging the Gap were successful at the outset and able to harness that success thereby becoming more confident in their weight loss efforts before they were forced to implement changes in their lives.

Relevant theories

Health behavior theory has often been used as a basis for health promotion interventions. It has been suggested that the synthesis and integration of theory, research and practice will advance what is known about health behaviors of individuals and communities. Theories may provide frameworks for health promotion interventions and a basis for assessing whether these interventions are successful (Glanz, Lewis & Rimer, 1990).

A theory can be explained as a set of interrelated concepts that describe, explain, predict or control behavior. Theories attempt to explain the how and why of human behavior. Because human beings are complex creatures, there is no one theory that can explain a behavior in each setting. For this reason, a variety of theories have been developed that may be applied to various situations (Glanz, Lewis & Rimer, 1990).

There are a variety of behavioral theories that can be applied to weight loss efforts. Some of these include the Health Belief Model (HBM), the Theory of Planned Behavior and Social Learning Theory (SLT). However, none of these theories have been applied to weight loss initiatives that include the use of medications. This section provides a comparison between Bridging the Gap and the Health Belief Model, the Theory of Reasoned Action and Social Learning Theory. Empowerment, a concept that is integral to the practice of health promotion, will then be discussed in the context of Bridging the Gap.

The Health Belief Model

The HBM is a theory used to describe health behavior and it assumes that human behavior is a rational process. Initially the model was used to describe preventive health behaviors that would involve activities such as immunization and yearly physical examinations. The model is now applied to a variety of health behaviors that involve more than one-time or intermittent involvement (Rosenstock, 1990). For this reason, it is possible to apply it to weight control behaviors.

The key variables of the model include perceived susceptibility, perceived severity, perceived benefits, perceived barriers, sociodemographic variables and self-efficacy. Perceived susceptibility refers to the individual's perception of the risk that they may contract a health condition. Perceived severity, also known as perceived threat, is the seriousness of contracting an illness and encompasses the medical, clinical and social consequences of such an outcome. Perceived benefits refer to the benefits of taking a health action while perceived barriers are the negative aspects of taking a health action. Sociodemographic variables described in the HBM include: age, gender, ethnicity, education and social status. Finally, self-efficacy plays an important role in the HBM. Self-efficacy can be used to describe the "conviction that one can successfully execute the behavior required to produce the outcomes" (Bandura, 1977 p. 79). Self-efficacy has been identified as an important factor in the initiation and maintenance of a behavior (Rosenstock, 1990).

These variables interact with each other and are the elements by which individuals are influenced to adopt certain health behaviors. If a health behavior would prevent the onset of a certain disease, sociodemographic variables would impact both the patient's perceptions about their susceptibility to the disease and the seriousness of it. This, in turn, would affect the perceived threat of a disease. The likelihood of the individual performing the health behavior would also be impacted by the weighing of the costs and barriers of taking the action combined with the individual's threat of getting the disease. Self-efficacy then surfaces as the individual's action depends on whether he or she perceives she had the ability to execute the behavior (Rosenstock, 1990).

The HBM can be applied to a weight loss initiative as it is a preventive health behavior. For example, perceived susceptibility may refer to the women's belief that obesity will cause health problems such as heart disease in the future. Perceived benefits could include the positive health aspects of losing weight or the ability to fit into clothes that are a smaller size.

The HBM has similar components as Bridging the Gap. Examples of this include the women's perception of the health consequences of their obesity and the perceived severity of these consequences. In addition, perceived benefits of initiating weight loss were considered by each of the women in Bridging the Gap. They believed that they would feel and look better.

Unfortunately, HBM does not accurately describe the complete process of weight loss using anorexiant medications. For example, a key difference between the two models occurs with the concept of self-efficacy. In Bridging the Gap, self-efficacy is not important for the initiation of the medications and weight loss. In fact, many of the informants did not feel confident in their abilities to lose weight as they had suffered several failures at weight loss attempts before. The physiological effects of the medications and the subsequent weight loss may have increased the women's self-efficacy during negotiating the bridge. By the time the women reached the stage of achieving a balance, their self-efficacy was much higher than when they initiated the medications and they had confidence in their abilities to implement life strategies to maintain their weight.

Theory of Planned Behavior

The Theory of Planned Behavior considers that all behaviors are not under complete volitional control, but fall into a continuum between complete control or no control. A situation where an individual has complete control over a behavior is where he or she may simply decide to perform the behavior and then complete it without incident. A situation where there is no control over the behavior can be exemplified by a situation where the behavior requires skills, opportunities or resources that are lacking (Godin, 1994).

The first two components of the theory are the attitude toward the behavior (Aact) and the subjective norm (SN). The attitude toward the behavior is a function of the beliefs about the benefits and consequences of performing a behavior while the subjective norm is a measure of what the individual perceives others will think about the behavior. Depending on the behavior being studied, Aact may be a more important factor in initiating the behavior or the SN may be (Godin, 1994).

The third component in this equation is the perceived behavioral control (PBC) that the individual has over the behavior performed. In essence, the PBC is the product of the control belief and the power belief. The control belief describes the presence or absence of resources and opportunities as well as the presence of anticipated obstacles. The perceived power is a belief that the individual can overcome a particular obstacle. Alternatively, perceived power can also be a hindrance if the individual believes that she does not have the power to overcome obstacles that inhibit the behavior. The attitudes toward the behavior, the subjective norm and the perceived behavioral control are summed to create an intention to perform the behavior. Intention and perceived behavioral control are assumed to predict the behavior (Godin, 1994).

One can apply this theory to non-drug weight loss initiatives. Attitudes toward the behavior and the subjective norm would likely positively influence the adoption of weight loss activities such as exercising and eating a well-balanced diet. The application of this theory to individuals using anorexiant medications to lose weight is somewhat difficult. As mentioned previously, many of the women who took anorexiant medications were not confident in their abilities to achieve and maintain their weight loss goals alone. Their confidence or self-efficacy appeared to improve as they experienced successful weight loss in negotiating the bridge. So again, a model that requires self-efficacy or in this case, perceived behavioral control to be high before a behavior is performed is not as accurate in describing how women who take anorexiant medications behave as is Bridging the Gap. The medications allow the women to experience some weight loss success and begin to gain self-efficacy in their weight loss initiatives before they are forced to implement life strategies.

Social Learning Theory

Social Learning Theory is a broad conceptualization that explains people's behaviors. Within this model there are a variety of constructs that address different aspects of the intention to perform health behaviors. Social Learning Theory can be applied successfully to non-drug weight loss initiatives. In the case of anorexiant therapy, only parts of Social Learning Theory can be applied. However, SLT is the most comprehensive in its description of what may impact the women's behavior. This section will describe the components of SLT and compare it to Bridging the Gap.

The first of the constructs in Social Learning Theory is reciprocal determinism and is the underlying assumption of the model. The continual interaction among the person, the behavior of that person and the environment in which a behavior is performed is its definition. This means that there are multiple avenues of change where change is not just dependent on the individual choosing to lose weight but is also influenced by her behavior and environment (Perry, Baranowski & Parcel, 1990). Reciprocal determinism is evident in Bridging the Gap in that each stage the women experienced was dependent on the environment that was composed of families, media, work environment and other aspects that influenced them.

Environments and situations are two other factors of importance in lifestyle behavior change. Environments are the external factors of that person and situations are the individual's perceptions of their environment (Perry, Baranowski & Parcel, 1990). In the case of Bridging the Gap the individuals who were interviewed acknowledged that their environment affected their behaviors. Many women dealt with this by implementing strategies such as allowing only healthy food in their homes or avoiding activities that did not have high food focuses as their social activities had previously.

Behavioral capability is the knowledge and skill required to perform a type of activity, in this case, changing lifestyles in order to lose weight (Perry, Baranowski & Parcel, 1990). As stated previously the women had made several attempts in the past to lose weight and had failed on some level. However, this failure does not mean that the women did not possess the knowledge and skills to implement lifestyle changes. In fact, many of the women were extremely well read and experienced in the area of weight reduction. As evidenced by their previous failures at weight loss, behavioral capability is not the only factor that influences the adoption of a behavior.

Expectations are the anticipatory effects of a behavior while expectancies are the values that the person places on the outcome (Perry, Baranowski & Parcel, 1990). Each of the women anticipated successful weight loss if they took the medications and implemented life strategies that were congruent with low fat eating and exercise. The outcome that the women were striving toward by implementing such behaviors was eventual weight loss. All women, with one exception, placed a high value on achieving their desired weight.

Self-control is the personal regulation of a behavior (Perry, Baranowski & Parcel, 1990). The women possessed a high degree of control over their food intake from the time they initiated the medication until it was discontinued. Even those women who noticed a decrease in their control over hunger as the therapy progressed still cited more control over this tendency that they had without the benefit of the medications. In the case of Bridging the Gap, the medications provided much of the control over their food intake, however once discontinued, the women would be compelled to maintain self-control over both their food intake and exercise regimens.

Observational learning is the component suggesting that behavioral acquisition is provided by observing others who have performed the behavior and experienced certain outcomes (Perry, Baranowski & Parcel, 1990). This particular concept is evident in the positive and negative role models that were present in the motivators component of reaching a space. The women saw the positive outcomes of the role models who they strove to be like and also saw the effects of not maintaining their behaviors in their negative role models. Often this gave them a frame of reference for what they had to do to achieve their goals.

Reinforcement may be a positive or negative response to a behavior that increases or decreases, respectively, the chance of reoccurrence (Perry, Baranowski & Parcel, 1990). This section of Social Learning Theory is particularly impacted by the use of medications. Again, in most weight loss initiatives, an individual is forced to perform certain behaviors such as exercise and adjusting eating habits to achieve weight loss that in turn reinforces these behaviors. When taking the medications, the women experienced some weight loss that reinforced restrained eating habits. If the women begin to exercise, the increase in weight loss will further reinforce these changes. The danger lies in the women relying solely on the medications to decrease their weight. If this occurs, then no life strategies will be implemented and, once the medication is discontinued, the weight will return.

Self-efficacy plays an important role in that it is the person's confidence in performing the behavior (Perry, Baranowski & Parcel, 1990). As mentioned in the discussion of the Health Belief Model, self-efficacy may be more easily developed by the use of the medications because the women achieve their weight loss goals in an easier manner. It must be reiterated that many of the women lacked self-efficacy in losing weight until they experienced success in the weight loss initiative, therefore the behavior (i.e., taking the medications in an effort to lose weight) was initiated when the individual lacked self-efficacy. This is an important area in which SLT fails to describe women who use anorexiant therapy for weight loss.

Emotional coping responses are the responses that the individual possesses for dealing with emotional stimuli (Perry, Baranowski & Parcel, 1990). Many of the women interviewed cited that eating food was an emotional coping response for them. This means that in order to diffuse this response, the women must be aware of it and have an alternate mechanism ready. Of course, the medications would not be able to impact this component of SLT directly. However, it may be hypothesized that the women shift their emotional coping responses from food to another mechanism in the phase achieving a balance when they become more introspective and strive to successfully implement life strategies.

In conclusion, Social Learning Theory may be applied to anorexiant weight loss as it attempts to address the many and varied impacts in this type of behavior. However, some differences due to the physiological effects of the medications mean that it can only be used in part. In addition, though SLT provides a description of the various factors that can influence health behavior, it does not describe a process. SLT simply lists the variables that influence behavior. Bridging the Gap describes a process which the women experience. Therefore, it portrays the impact of the medications on the women's weight loss behavior in a manner that SLT is unable to.

Empowerment

Empowerment has become a key concept in the practice of health promotion (Labonte, 1993; Wallerstein, 1992). The concept can be more easily understood by examining the concepts of power and powerlessness. Power can be defined as the "capacity of some persons and organizations to produce intended, foreseen and unforeseen effects on others" (Cornell Empowerment Group, 1989). Alternatively, powerlessness in individual's lives can be described as the "expectation of a person that his of her own actions will be ineffective in influencing the outcome of life events" (Lord & Hutchinson, 193, p.6).

Similar to the concept of control, empowerment itself can be viewed as either a process or an outcome. In a broad sense, empowerment can be defined as a process by which individuals, organizations and communities can gain control over their lives. However, it is important to note that the process and resources required to achieve empowerment are individual. In other words, strategies and resources required to achieve empowerment will be different in different contexts. For example, the empowerment of a single mother with very little social support in a low income area to gain control over her weight using an exercise program will require very different resources than an initiative that attempts to empower a woman with a supportive family in an upper class neighborhood to exercise (Labonte, 1993).

The outcome of empowerment is an individual who possesses a "positive self-concept, personal satisfaction, self-efficacy, a sense of mastery, a sense of control, a sense of connectedness, self-development, a feeling of hope, social justice and an improved quality of life"(Gibson, 1991, p. 359). The question arises whether anorexiant medications help empower women to maintain life strategies to achieve and maintain weight loss. The women who moved into the realm of achieving balance had begun to exhibit concepts indicative of an empowered individual including a higher degree of self-efficacy in maintaining life strategies, a sense of mastery and feelings of hope. Seven of the nine women were extremely hopeful about the future successes of their weight loss initiative. Most importantly, the women possessed a feeling of control, that began with the initiation of the medications and extended to achieving a balance.

For the most part, Bridging the Gap was a process that helped the women empower themselves to achieve and maintain their weight loss goals. The medications' immediate effects on the women's appetites created initial successes that the women built on. These successes gave them confidence and a sense of mastery over the realm of weight control and the medications helped arm the women with sufficient emotional fortitude to continue their weight loss efforts unassisted and achieve a balance in their lives.

Alternatively, one must consider the fact that the medications may be creating powerlessness in the women who use them. Seven of the nine women interviewed were well into the stage achieving a balance and were beginning to feel confident about their abilities to maintain the weight loss independent of the medications. However, they expressed the wish that there were medical options available to them if the weight returned. One of the women who had regained some of the weight she had lost previously was beginning to experience frustration with her non-medicated weight loss efforts. At the time of the second interview she was considering medications as one of her future options to achieve weight loss again.

One can hypothesize that women who do not remain in the phase, achieving a balance, will begin to feel disempowered with respect to their weight loss efforts. If this occurs, the medications could have contributed to the women's powerlessness in that the women would begin to believe that their weight loss could only be attributed to the medications and not their efforts at implementing life strategies. If this negative cycle begins again, the women are left with even fewer weight loss options and more frustration at the prospect of finding a solution to their weight loss efforts.

Limitations

The main limitation of this study was the time frame in which the study was conducted. Over a period of three months all informants were interviewed twice about their experiences with weight loss medications. It would have been useful to have access to the informants for a longer period of time to discover whether they remained within achieving a space or whether they were unable to maintain life strategies, gained weight and began the cycle again.

In addition, it must be recognized that the women interviewed for this study were a volunteer sample of informants who were willing to speak of their experiences with anorexiant medications. For the most part, the women had positive opinions of the medications. Women who had negative experiences with prescription weight loss medications may have been reticent about speaking of their experiences with the medications and therefore, not volunteered.

The researcher's professional and personal experiences with anorexiant medications should also be noted as a possible, lack of neutrality. However, credibility and neutrality were addressed throughout the project by ensuring that the researcher acknowledged the possible bias during the study. This was achieved by discussing analysis issues with the supervisor, validating the emerging theory with the informants during the second interview and recording personal thoughts in field notes during the study. However, professional and personal biases that the researcher had were not revealed to the informants during the interviews. In addition, the emerging model differed slightly from the experiences of the researcher. Finally, the description of a negative case ensures the reader that the researcher was cognizant of atypical cases that may represent a range of events that are not identically shared with the other informants (Morse & Field, 1995).

Another limitation is in Bridging the Gap's application to other individuals, specifically men, who begin to take the medications. It is unknown whether men would experience a different process. Women have experienced a great deal of societal pressures for weight loss that are different than what men experience (Akande, 1993; Rodin, 1993).

The usage of the model itself may be limited with the withdrawal of the fenfluramines from the market. The public may be more cautious of weight loss medications in the future because of the recent concerns over the heart valve damage the Fen-phen combination have been reported to cause. If this is the case, there may be a more detailed weighing of the risks that occurs previous to the drug's initiation. Finally, the pressure to lose weight by alternative means may be heightened by the media, acquaintances and health care professionals who are wary of the adverse reactions that these medications have been seen to create. Unfortunately, data collection and analysis had been completed before the medications were withdrawn from the market and the women's reactions to this event were not incorporated into the model.

Implications

Practice

When this project was first conceived in the fall of 1996, fenfluramine and phentermine were being used both alone and in the combination, Fen-phen, and dexfenfluramine had not yet been approved by the Health Protection Branch for use in Canada. Now, a year later, both the rise and fall of the use of prescription diet drugs has been experienced by Canadian society. As of September 15, 1997, dexfenfluramine and fenfluramine have been pulled from the market over concerns about heart valve defects that have been linked to the use of the Fen-phen combination (FDA Website, personal communication, September 16, 1997). At this time, only phentermine and diethylpropion are available for the public's consumption. As this study examined the use of any and all prescription weight loss medications, the findings of these women's experiences still apply. The large prescription weight loss market almost ensures that there will be subsequent medications approved for human use to lose weight. In that sense, the current use of diethylpropion and phentermine and the likely use of other agents require that a process which dieters experience be available for health care professionals to consider.

It is important to reflect on what important information this model provides, particularly to health care providers who deal with the majority of requests for the medications. As reviewed in Chapter 2, some health care professionals have negative attitudes toward obese individuals. Stigmatization of obesity extends from our social world to our medical professions. Thus, if obese individuals are described as "ugly and weak-willed" by some physicians (Maddox & Liederman, 1969, p. 218) it follows that the cure for this disease is believed to be simply a matter of self-restraint. It is recommended that the obese woman just stop being so lazy and stop eating so much. Unfortunately, not only do such recommendations ignore underlying motivations to eat, but they ignore the fact that the majority of obese women have tried to diet and are already emotionally and physically spiraling downward from their many failed attempts. Bridging the Gap reiterates the importance of the medications in these women's lives to achieve and maintain their weight loss. More importantly, the model reflects the fact that the medications were an integral part of their movement from reaching a space to achieving a balance or from being out of control to experiencing the control that the medications provided. This model explains these women's experiences and how necessary the medications were to Bridge the Gap. Hopefully, it will provide health care professionals information on the process of losing weight using anorexiant medications so they have empathy for the patients who request the medications or fret over the withdrawal.

There is debate about the use of prescription medications for the purpose of losing weight. With the recent recall of the fenfluramines, the debate has swayed to the side of those who believe that the medications should not be used. However, it is important that the use of these medications is not dismissed entirely. The medications serve an important role in accomplishing the desired weight loss. When used for the appropriate individuals and when other lifestyle change strategies are implemented the medications can serve to help patients bridge the gap from the a time when they feel out of control and are overweight or gaining weight to a time where they are well on their way to achieving their weight loss goals and achieving a balance in their lives.

Research

There are several research implications that arise from Bridging the Gap. Bridging the Gap focused on women's experiences taking anorexiant medications. Future research should include men who have taken these medications in an effort to discover whether they experience the same or a similar process. A comparison between what each gender may experience on these medications would be useful to practitioners to assist them in adjusting their interactions with patients if necessary.

Another qualitative study may be timely now that fenfluramine and dexfenfluramine have been withdrawn from the prescription market. Weighing the risks is an important component of negotiating the bridge. During this phase, the women began to weigh the costs and benefits of being on the medications because of the negative and positive opinions of others, the attitudes of physicians and the incidence of side effects. Women may now perceive more costs associated with the use of the medications. In addition, if the same informants were questioned again, a researcher may find more negative or apprehensive attitudes toward the medications than were evident at the time of data collection.

In an effort to validate and generalize the model it is feasible to apply it to a larger population of individuals who used medications to attain weight loss. A survey of a random sample of individuals who have used or are currently using anorexiant medications may be a valuable mechanism to decide whether the process experienced by the women in this study is applicable to the general population of individuals who use medications to control their weight. This information would be insightful as it would allow health care professionals to adapt their care of obese patients to reflect the importance of the medications in individuals lives. In addition, if the model proved to be generalizable, professionals within the medical sciences would view the model as a credible experiential process and adoption of it in practice would be facilitated.

Conclusions

The process, Bridging the Gap, provides health care professionals a description of the experiences of women who seek to lose weight using prescription anorexiant medications. The model illustrates the complex emotions that the women experience, from the pressure to begin losing weight, to the act of taking the medications and experiencing weight loss and finally, to the stage in their lives where they achieve a balance. The phases of the model also reveal the process of achieving control while using the medications. Finally, Bridging the Gap illustrates the mechanisms by which the medications encourage the development of the women's confidence in their abilities to successfully achieve a balance.

Bridging the Gap is a unique weight loss experience because it provides the individual with the physiological boost to gain control over their eating habits from the outset. This means that the dieter can build from her experiences of successful weight loss and have the confidence that they can implement the other changes, particularly those that are necessary for long term weight loss and maintenance.

Regardless of the current debate surrounding the medications usage for the treatment of obesity, this model provides health care professionals a framework with which to reflect on what their patients may be experiencing. It also reminds us that, though controversial, anorexiant medications can play an important role in the experiences of successful weight loss in appropriate individuals. Finally, this model may help professionals understand women's battles with weight control. This, in turn, can help cultivate non-judgmental attitudes and empathic responses about individuals struggling with weight control.

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Appendix A

Are you currently on medications for weight loss that your physician prescribed for you ?

OR

Have you been on these types of medications in the past year ?

There is a project being done at the University of Alberta that is studying the experiences of women who have taken prescription drugs to lose weight

If you are female, 18 years of age or older and are interested in taking part in 2 interviews that will discuss weight control and your experiences with these medications, please call Carlyn at 492-0092.

Appendix B

Initial interview guideline
(for patients who are currently taking medications)

1. Tell me about your experiences with weight control.

2. How did it come about that you started on the prescription medications for weight loss? Possible probes:
    - personal choice
    - physician pressure
    - family pressure
    - heard about it one TV/ in magazine / etc....

3. Can you describe how you felt during the first few days of therapy????
    Possible probes:
    - in control?
    - apprehensive?

4. Was there a time when those feelings changed? If so, describe.

5. Are you using other weight loss strategies throughout the therapy? If so, can you tell me about them?
    Possible probes:
    - exercise?
    - eating habits?

6. Are you ever afraid that you will gain back the weight?

7. Would you have any advice for someone considering going on this type of therapy?

8. How does this type of therapy compare with your other methods of losing weight?

9. Do you think your life will be different if your weight loss is successful? If so, how?

10. Describe how your friends/family have reacted to your weight control efforts in the past?

11. How have your friends and family reacted to this most recent attempt?

Initial interview guidelines
(for patients who have been on the medications previously)

1. Tell me about your experiences with weight control.

2. How did it come about that you started on the prescription medications for weight loss? Possible probes:
    - personal choice
    - physician pressure
    - family pressure
    - heard about it on TV, in magazines, etc....

3. Can you describe how you felt during the first few days of therapy?
    Possible probes:
        - in control?
        - apprehensive?

4. Was there a time when those feelings changed? If so, describe.

5. Did you use other weight loss strategies throughout the therapy? If so, can you tell me about them?
    Possible probes:
        - exercise?
        - eating habits?

6. What was it like to discontinue the medications?
    Possible probes:
        - scary?
        - empowering?
        - loss of control?

7. What strategies did you use/are you using to maintain your weight loss?

8. Do you feel that your life has changed since your weight loss occurred?

9. Are you ever afraid that you will gain the weight back?

10. Would you have any advice for someone considering going on this type of therapy?

11. How does this type of therapy compare with your other methods of losing weight?

12. If you were successful in losing weight, what would you attribute your success to?

13. If you weren't successful what would you attribute the inability to lose weight to?

14. Would you do things differently next time? How?

15. How have your friends/family reacted to your weight loss efforts?

Secondary interview guidelines
(people who are still on medications)

1. Tell me about what your weight control efforts have been like since we last met.

2. Was there anything that occurred to you since our last meeting that you would like to discuss?

3. What are your feelings about the medications now?

4. When are you or the physician considering the discontinuation of the medications?

5. What is your reaction to the possibility of stopping the medications in the future?

6. What has your life been like in the past couple of months???
    Possible probes:
        social life
        family
        work environment

7. Have others commented on your weight loss efforts? What have they said?

8. How do their opinions make you feel?

Any further questions will be focused on themes that have developed from the initial interview.

Secondary interview guidelines
(patient discontinued medications)

1. Tell me about what your weight loss efforts have been like since we last met.

2. Why did you discontinue the medications?

3. If you lost weight, what would you attribute your success to?

4. If you did not lose weight, what would you attribute your inability to lose weight to?

5. Are you afraid that you will gain the weight back?

6. How did you feel the first few days after discontinuing the medications?

7. What do you feel about the medications now?

8. What have your family/friends said about your discontinuation of medications?

9. How will you manage your weight in the next few months? Years?

10. Would you consider going on the medications again?

11. What kind of advice would you give to someone who was consideing going on this type of medication?

12. What kind of advice would you give someone who has discontinued these medications?

13. What has your life been like since you have discontiued the medications?
    Possible probes:
        social life
        family life
        work

14. Did anything occur to you since we last talked that you would like to discuss?

Any further questions will be focused on themes that have developed from the initial interview.

Secondary interview guidelines
(patients who are still not on any medications)

1. Was there anything that occurred to you since our last meeting that you would like to discuss?

2. Tell me about you weight control efforts since we last met.

3. What do you attribute your success/failure to?

4. Would you consider going back on the medications?

5. Would you have any advice for individuals who have discontinued the therapy?

6. What are some of the strategies you are currently using in your weight control efforts?

Any further questions will be focused on themes that have developed from the initial interview.

Secondary interview guidelines
(patients restarting medications)

1. Tell me about your weight control efforts since we last talked.

2. How did it come about that you restarted on the prescription medications for weight loss again?

   Possible probes:

   - family pressure
   - social pressure
   - this study

3. How have your weight loss efforts changed since you were put back on the medications?

4. Are you using any strategies, besides the medications, to help with weight control?

5. How has your life been since you restarted the medications?

6. How did you feel the first few days of starting the therapy?

7. Does it feel different than last time?

8. What do your friends/family think about this most recent weight loss effort?

9. What are your hopes for this new attempt at weight loss using the medications?

10. Are these different from the last time you tried the medications?

11. Is it different from when you have controlled your weight without the medications?

Any further questions will be focused on themes that have developed from the initial interview.

Appendix C

Demographic Questionnaire

Name:______________________________

Address:____________________________
____
____

Postal Code:_________________________

Home phone number:_________________**Work phone number**:_______________

Age:________________________________

Occupation:__________________________

Education level: (circle one highest level completed)

elementary grade 9 grade 12 technical college university

post-graduate degree

Marital Status: (circle one)

never married divorced married widowed

Number of children: (if applicable) ____________________

List previous or current weight loss programs (i.e., Weight Watchers, TOPS, etc...) that you have been a member of and briefly describe when you took part in it and what the result was.

Appendix D

University of Alberta
Faculty of Pharmacy and Pharmaceutical Sciences
Informed Consent Form

PROJECT TITLE: The process of weight loss with anorexiant therapy:
a grounded theory approach.
INVESTIGATOR: Carlyn Volume, BSc. Pharm. Phone: 492-0092
THESIS SUPERVISOR: Karen B. Farris, Ph.D. Phone: 492-2020

The purpose of this research project is to increase health care professionals understanding of the experiences of women who are prescribed medication to help with weight loss. Interviews will be conducted at least twice with each interview lasting approximately one hour. During each interview, questions will be asked about your decisions to begin taking these medications, your experiences while on them and, if applicable, your experience when you stopped taking the medication(s). All interviews will be audiotaped and transcribed. Contents of the interview are strictly confidential, however, the final report may contain anonymous quotes from selected interviews. This final report will be made available to you at your request.

There will be no direct benefit to you as a participant of this study. However, the information that you provide will be made available to health care professionals that deal with patients on these medications and this may affect patients' care in the future.

THIS IS TO CERTIFY THAT ______________________________ (print name)
HEREBY agrees to participate as a volunteer in the above named project.

I hereby give permission to be interviewed and for these interviews to be audio-tape recorded. I understand that the transcribed records of each interview will be kept on file for the purposes of future research in this area subject to the approval of the appropriate ethical review board. I understand that the information may be published but my name will not be associated with the research.

I understand that I am free to deny any answer to specific questions during the interviews. I also understand that I am free to withdraw my consent and terminate my participation at any time, without penalty.

I have been given the opportunity to ask whatever questions I desire, and all such questions have been answered to my satisfaction.

_______________ _______________ _______________
Participant Witness Researcher

____
Date

*Adapted from Morse, J. and Field, P. (1995). Qualitative research for Health Professionals. (2nd ed.). Thousand Oaks, CA: Sage.